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ABSTRACT

The purpose of this packet is to assist school districts and other agencies in establishing a technology education program based on the computer mentor model. An "Executive Overview" is provided, along with the "Computer Mentoring Course Guide" and "Computer Mentoring: A Case Book." The Computer Mentor program was designed to prepare experienced computer-using teachers to serve as mentors to other teachers in their school sites. The program was implemented as a cooperative effort of the University of Maryland and the Prince Georges County Public Schools. Mentors, who selected one to five teachers as proteges, participated in a one-semester course that provided guidance and information on specific technology and resources. Summative evaluation data for 2 semesters and 21 mentors (54 proteges) indicated the value of the program in affecting teacher attitudes and technology use. The "Computer Mentoring Course Guide" includes specific information and samples pertaining to the program's course. "Computer Mentoring: A Case Book" provides a compilation of issues and experiences encountered by former program mentors. It is used as a resource in the mentor course. In addition, a videotape, "Mentoring: Issues and Concerns," is available. (Contains 6 references.) (SLD)

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Mentoring: An Approach to Technology Education for Teachers
Executive Overview

Charles A. MacArthur, Ph.D.*
University of Delaware

Dana Peterson, M.Ed.
University of Maryland

Mary Kercher, M.A.
Prince Georges County Public Schools

David Malouf, Ph.D.*
United States Department of Education

Virginia Pilato, Ph.D.*
Maryland State Department of Education

Pat Jamison, Ph.D.
Prince Georges County Public Schools

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* These authors worked on this project while employed at the University of Maryland.

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Rationale and Objectives

The effectiveness of microcomputers in school settings depends on how successfully teachers integrate computers with their educational goals and curriculum (Winkler, Shavelson, Stasz, & Robyn, 1985; MacArthur & Malouf, 1991). Research indicates that teachers need both inservice education and long term support in order to integrate computers with the curriculum in meaningful ways (Goodson, 1991). In their study of accomplished computer-using teachers, Sheingold and Hadley (1990) found that development of mastery in educational use of computers was a gradual process requiring several years and that "on-site support and colleagueship [were] critical ingredients to successful technology use."

One solution to providing the continuing, school-based support needed to help teachers learn to integrate computers into their instruction is mentoring. Mentoring programs have been widely used to support beginning teachers (Huling-Austin, 1990). Key features of the mentoring approach are that assistance is provided within the context of a personal relationship and focused on the individual needs of the protege.

The Computer Mentor Program was designed to prepare experienced computer-using teachers to serve as mentors to other teachers in their school sites. The program was a collaborative effort of the University of Maryland and the Prince Georges County Public Schools. The goals of the program were to increase knowledge about educational applications of computers and integration of computers into the curriculum for both proteges and mentors and to establish collegial relationships within schools that would continue beyond the end of the formal mentoring program.

The Structure of the Computer Mentor Program

Several important features from the literature on mentoring were incorporated in the design of the program. First, mentors were selected based not only on experience with computers but also on recommendations about their teaching expertise and interpersonal skills. Second, mentors recruited proteges from their own schools to maximize opportunities for contact and the impact on educational practice in individual schools. Third, a formal structure and incentives for both mentors and proteges were established to enhance commitment to the mentoring program and provide recognition for their efforts. Finally, involvement of principals was sought to ensure that participants would have time to meet and support in implementing instructional changes.

The overall structure of the program included a course for mentors and a workshop for their proteges. Mentors selected as proteges one to five teachers in their schools who were interested in making better use of technology in their teaching. Mentors participated in a one semester course which provided (a) guidance in how to serve as a mentor to other teachers and (b) information on specific technology applications and local resources. The mentoring strand was supported by a videotape and a book of illustrative cases based on the experiences of prior mentors in the project. To stimulate reflection on the mentoring process, mentors were asked to write weekly in response logs concerning the progress of their mentor-protege sessions, their relationships with proteges, and their own development as computer mentors. Topics for the technology strand were selected based on a needs analysis of mentors and proteges.

The mentor-protege relationship was structured through the use of individual plans developed between each mentor and protege. Mentors and proteges met weekly for workshop sessions. In the last session of the mentoring course, mentor-protege teams presented their accomplishments during the semester.

Formal Evaluation

Summative evaluation data were collected for two semesters during the second year of the project (1991-92), including 21 mentors and 54 proteges. The evaluation drew on several different measures: First, course evaluations, covering both technology and mentoring aspects of the courses, were completed by mentors and proteges. Second, a Computer Questionnaire, completed at the beginning and end of each semester by both mentors and proteges, provided information on changes in technology knowledge and skills and frequency and type of computer use. The questionnaire covered eight major categories: skills with (1) hardware, (2) computer assisted instruction software, and (3) tool software; skills in (4) management of computers in classrooms, (5) integration of computers into the curriculum, and (6) professional collaboration; and amount and type of computer use (7) with students and (8) for professional and personal purposes. Third, proteges maintained logs of their computer use for two weeks at the beginning and end of the semester. Finally, mentors' response logs provided qualitative information for the evaluation.

Course Evaluations. The results of the mentor course evaluations were highly positive. On the technology questions, all of the mentors in both semesters agreed or strongly agreed that the course had provided opportunities to learn more about educational software; 95% thought they had learned more about technology resources; and 85% agreed that they had increased their skill at integrating computers with instruction. On the mentoring questions, all except one of the mentors agreed or strongly agreed that they had been successful as mentors and had learned a lot from the experience of mentoring. On the open-ended questions, the mentors elaborated on the value of mentoring and the benefits to themselves.

The proteges were also highly positive in their evaluations of the program. Most of the proteges agreed or strongly agreed that the course had increased their technical skills (96%) and knowledge about integrating computers with instruction (85%). Most of them also agreed that they had learned more from their mentors than from traditional inservice courses (88%). The most common responses to the open-ended question about the advantages of mentoring focused on (a) the importance of having the mentor in the same school to answer questions and help out when needed, (b) the value of a supportive personal relationship with their mentor, and (c) the familiarity of the mentor with the students and computer resources in the school.

Computer Questionnaire. Results for the proteges indicate significant increases in knowledge and skill and in frequency of computer use. In all three technical areas (skills with hardware, CAI software, and tool software) and in frequency of use both with students and for professional/personal purposes, increases from pretest to posttest were highly significant ($p < .001$). Increases in skill in management of computers in classrooms and integration with the curriculum were smaller but still significant ($p < .01$). Mentors made significant ($p < .05$) gains in all areas except frequency of use with students. The largest gains ($p < .01$) were in skills with hardware and software tools and in professional collaboration.

Computer logs. The proteges reported significant increases ($p < .05$) in both the frequency of computer use and in the variety of programs used. Median frequency of computer use increased from 0.4 to 7.5 instances per week for the fall group and from 5.0 to 9.6 for the spring group. Median number of programs used increased from 0.4 to 3.9 for the fall group and from 2.1 to 3.3 for the spring group.

Response logs. The mentors' weekly entries in the response logs provided a valuable source of information on their perspectives about mentoring. The response logs were analyzed to identify common themes. Three themes were associated with establishing a mentorship: getting started as a group, initiating mentor-protege relationships, and understanding and adapting to relevant mentor roles. Although there was great variety in how mentors and proteges interacted, a common finding was the multifaceted nature of mentoring and the need for flexibility as the relationships developed. Three additional themes focused on protege concerns that arose during mentoring: protege attitudes toward being mentored, protege attitudes toward technology, and helping proteges with classroom management problems. Mentors' perspectives on the outcomes of the program were divided into outcomes for proteges, mentors, and schools. Mentors expressed pride in the accomplishments of their proteges. Mentors also felt the program had helped them gain worthwhile relationships and leadership skills as well as enhanced knowledge about technology. Many mentors reported an overall impact on the use of computer technology throughout their schools.

Computer Mentor Program Materials

The purpose of this packet is to assist school districts and other agencies in establishing a technology education program based on the computer mentor model. In addition to this overview, the following materials are included in the packet: 1) the Computer Mentoring Course Guide, which includes specific information and samples pertaining to the course offered through the program; and 2) Computer Mentoring: A Case Book, the compilation of issues and experiences encountered by former program mentors and used as a resource in the mentoring course. In addition, a videotape entitled, "Mentoring: Issues and Concerns," featuring noted mentoring expert Dr. Rochelle Clemson, is available by contacting Dr. Patricia Jamison, Prince Georges County Public Schools, 14201 School Lane, Upper Marlboro, MD 20772, (301) 567-4703.

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Computer Mentoring: A Case Book

Computer Mentoring: A Case Book

by
Virginia H. Pilato, Ph.D.
Dana B. Peterson, M.Ed.
Mary H. Kercher, M.A.

with
David B. Malouf, Ph.D.
Charles MacArthur, Ph.D.
Patricia Jamison, Ph.D.

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Table of Contents

Introduction 3

Participating Schools 5

Chapter 1: Getting Started 7

Chapter 2: Logistics 11

Chapter 3: The Importance of Administrative Support 17

Chapter 4: Protege Attitudes Toward Being Mentored 22

Chapter 5: Protege Attitudes Toward Technology 25

Chapter 6: The Mentor–Protege Relationship 29

Chapter 7: Mentor's Role 32

Chapter 8: Protege Concerns with Behavior Management 36

Chapter 9: Technology and Troubleshooting 39

Chapter 10: Outside Experiences for Mentors & Proteges 42

Chapter 11: Success Stories 46

Chapter 12: The Effectiveness of the Mentoring Program 52

Conclusion 59

Introduction

The Computer Mentor Project

The Computer Mentor Project was the result of a grant awarded by the U.S. Department of Education/Office of Special Education Programs to the University of Maryland and Prince George's County Public Schools. The purpose of the project was to enhance teacher training in the effective use of computers.

A teacher mentor model was the focus of the project. Over a three-year period, cadres of experienced computer users were trained to develop mentoring skills to help computer novices in their schools acquire expertise. Each participating school benefited from the extension of teacher competencies for integrating computers into instructional programs.

Project training was delivered in the form of one 15-week computer mentoring course offered through the University of Maryland Office of Laboratory Experiences. Six to twelve Prince George's County teachers (K-12) were chosen for each mentoring course. Mentor candidates had to meet project requirements focusing on instructional computing expertise, outstanding interpersonal skills, and effective teaching.

The mentor training program was open to both special education and regular education teachers. Because project funding focused on providing services for students with disabilities, care was taken to ensure the participation of special educators. However, the principles of the mentor training program were widely applicable, and the course was appropriate and beneficial for teachers across all grade levels and a variety of specialty areas.

Mentor teachers recruited approximately one to five proteges within their own schools. Mentors were responsible for providing their proteges with a school-based computer class, for which the proteges received state approved workshop credit. Mentors and proteges began by assessing their individual computer skills with a self-assessment questionnaire, and the goals and course content for each protege were then outlined in an Individualized Mentoring Plan (IMP). As mentors learned more about the mentoring process in their training course, they practiced their skills with their proteges.

The Computer Mentor Case Book

Purpose. The purpose of the Computer Mentor Case Book is to provide new mentors with a large array of experiences other computer mentors have had working with their proteges. For new mentors, this book will be a preview and a guide to many of the typical experiences they will face as mentors.

The source of the vignettes contained in this book is the collection of response logs of the first three groups of mentors to complete the mentor training course. Through their reports, the mentors have identified several major themes. Their accounts present the joys and problems, the successes and frustrations of computer mentoring.

For purposes of readibility and continuity, minor editing has been done. In addition, all participating school, mentor, and protege names, as well as personally revealing information, have been changed to maintain anonymity.

Organization. The Computer Mentor Case Book is organized around a number of major mentoring themes. These are presented in a loosely time–ordered format, beginning with how to get the mentorship underway and ending with a discussion of successful mentorships.

Each chapter begins with a case depicting an actual mentor experience pertinent to the chapter's theme. This is followed by a brief "Challenge" section, which focuses on and discusses the topic. The "Related Mentor Experiences" section follows this with descriptions and narratives by previous mentors of their encounters with the issue being addressed. Finally, each chapter concludes with several discussion questions.

The Computer Mentor Case Book has been developed in such a way that it may be read from beginning to end, or individual chapters of interest may be read separately. A contiguous reading will provide the reader with a more complete overview of the mentoring process, as well as revealing the growth and change of former mentors and proteges as their stories are told. However, the book may also be used as a quick reference for a mentor with concerns on any of its topics.

Updates. The Computer Mentor Case Book owes its existence to the mentors who have shared their thoughts and experiences. It began with the first group to complete the mentoring course, and has been expanded as each new class commenced. The comments and experiences of each mentor class were subsequently incorporated into the book in order to include the freshest and most diverse information available.

Acknowledgements

The authors gratefully acknowledge the efforts of the schools that participated in the Computer Mentor Project. Their support of the mentors and proteges was vital to the success of the project.

Participating Schools
Spring 1991

Elementary Schools

Kenmoor Elementary School
Rogers Heights Elementary School

Middle Schools

Stephen Decatur Middle School
Thomas Johnson Middle School
Benjamin Tasker Middle School

Fall 1991

Early Childhood Centers

Chapel Forge Early Childhood Center

Elementary Schools

Concord Elementary School
Robert Frost Elementary School

Middle Schools

Hyattsville Middle School
Kettering Middle School

High Schools

DuVal High School
High Point High School

Spring 1992

Early Childhood Centers

Panaroma Early Childhood Center

Elementary Schools

Magnolia Elementary School
Mattaponi Elementary School
Samuel Chase Elementary School

Middle Schools

Thomas Johnson Middle School

High Schools

Fairmont Heights High School
Friendly High School
Suitland High School

Fall 1992

Elementary Schools	Middle Schools
Bladensburg Elementary School	Thomas Johnson Middle School
University Park Elementary School	James Madison Middle School

High Schools

Roosevelt High School
Suitland High School

Spring 1993

Elementary Schools	Middle Schools
Thomas Stone Elementary School	Buck Lodge Middle School

High Schools

Suitland High School

We also express our thanks to Dr. Rochelle Clemson, Chief of Teacher Education and Certification, Maryland State Department of Education, for her mentorship of the project.

Chapter 1: Getting Started

Case: **The First Meeting**
Mentor: **Lucie**

My first meeting with the proteges largely involved a discussion of what this course is about. We discussed each question on the self-assessment questionnaire, and each of the proteges completed it.

We continued the meeting the next morning with a discussion of what the proteges wanted to accomplish from the course. The group seems to be very receptive to learning anything that will help them perform better as teachers. However, one teacher definitely shows a fear of computers. My personal goals will be to help her overcome her fear of computers and to actually enjoy using the computer.

A concern shared by the group is the fear of the computer system breaking down while a group of students is working in the lab. I hope to establish procedures for troubleshooting that will eliminate this fear.

We have established goals for technical expertise as well as management skills in the computer lab. Our Individualized Mentoring Plan (IMP) outlines these goals, as well as the activities we have chosen to meet them.

Since our teachers need to learn the basics, I plan to cover some fundamentals in the next few class meetings. We will learn and discuss computer terms. We will go over the proper care and use of both hard and floppy disks. We will discuss the capabilities of *AppleWorks*, and then I will start the proteges' hands-on experience with the *AppleWorks Tutorial*. This basic game plan should be a good starting point for us.

Challenge

How do you go about getting the mentor-protege relationship underway? The most obvious starting point is the first meeting of the mentor and proteges. Creating objectives and laying out ground rules are common functions of the first meeting. Some mentors have also found it helpful to solicit and address any fears or apprehensions their proteges may have.

Whatever the agenda, the first few mentor-protege meetings are important in establishing a system of open communication with your proteges. Proteges need to know that their concerns will be acknowledged and, although you may not have all the answers, their questions will be responded to. Setting the tone for a supportive and comfortable atmosphere will help to maximize learning.

Related Mentor Experiences: Beginnings

Rachel:
My team met after school to start discussing our implementation plan for the course. We started by completing the self-assessment questionnaires and discussing our basic needs for a starting point. We had a tremendous flow of ideas. I felt wonderful that everyone was communicating so well. We were able to develop a good working plan, and I think everyone felt very comfortable with each other.

*

Dorothy:
Our small group met for the first time today. Each person filled out the self-assessment questionnaire. They voiced many insecurities and wondered if they should grade themselves as "low" on every item. As they talked among themselves, they began to see that each of them had some strengths.

All three learned to load the computer both locally and via the network. They each practiced. The group was very excited about increasing their knowledge and being able to use the lab with their children. They also learned to use the control key, open apple, and reset! Each time I loaded the computer network for the next week, I would grab one of them to do it for me!

*

Martin:
The first meeting with proteges and mentors was successful. We agreed that we would all follow a similar program as a team, since most of the members had little knowledge of computer hardware and software.

Our main objectives are to learn about basic hardware and software that is applicable to the French immersion program. We will explore the possibilities of using a telecommunications system to share writing activities and pen pals with other French immersion programs in the USA.

*

Louise:
Today was our first actual meeting. We met before and after school. Our before-school meeting consisted of reviewing what an IMP is, sharing our concerns about the project, and discussing what will be expected of the proteges. After school, we set up beginning goals and designed a game plan.

As expected, Janet's eyes were wide open in fright as the discussions began. Eventually, they returned to a more normal state. I gave her a copy of the sample IMP outline with the first goal of making the protege feel comfortable with the computer. Because of her inexperience with computers, we both felt that was the appropriate starting point for her. Other goals were discussed, and she is going to list more before Monday's meeting.

Betsy has almost as much computer experience as I have. We plan to use the database she began as a system both she and Janet can use in finding appropriate software for their classes. Her major concern was setting up plans to take her twenty–nine wild, inattentive class "beings" to the computer lab and leave it with the computers intact and the students unbruised.

*

Chris:
My two proteges and I met for the first time today. I immediately detected a lack of enthusiasm on their part. I showed them a sample IMP and explained that the purpose of this first meeting was to determine a starting point. Leslie and Erin still seemed disinterested, but we eventually established an overall goal: to get more kids doing meaningful activities on computers.

Leslie, a special education teacher, mentioned that she was concerned that kids can sit on drill and practice programs without learning anything. Erin agreed, pointing out that if kids just keep hitting keys, they can eventually get out of the program. I told my proteges that part of the problem is that students are often placed at inappropriate levels, which leads to boredom. My proteges did not realize that different levels can be specified through the "Teacher Options" menu on most programs. I showed them how to make such adjustments on two popular programs. They expressed amazement at how much more appropriate the lessons became when a level was specified. They had never known about this option because they had never had time to read through the manuals.

I was thrilled at the unexpected, valuable discovery I was able to lead my proteges to in this first meeting. I think that when we adjourned an hour later, both Leslie and Erin were considerably more interested in learning about integrating computers into their classrooms.

*

Justine:
When I first mentioned the mentoring program to my colleagues, they were less than thrilled. I felt like the three people who agreed to work with me did so more as a favor than out of real interest. When I was planning the first meeting, I wanted to think of some way to get my proteges excited. I developed a slide presentation showing the different uses of technology with students with various disabilities so that they could see what was possible. This got them motivated, and stimulated their thinking about IMP goals. Not everything my proteges chose to learn was within my current repertoire of skills, but I told them I would be happy to learn with them. To help us bond as a group, we decided to call ourselves the "Star Techies."

*

Pam:
I felt good after the first real session. I can compare it to teaching first grade. You really know you have taught your students something because you know how little they knew when you started.

*

Susan:
Our group met for the first time and we made tentative plans for what we would accomplish together. Wow! If we could only stop the clock until they have a chance to try everything they want to do! It seemed like everytime someone had an idea, someone else would say "Oh, I want to do that, too!" I had to guide them into thinking about what would be most helpful for them to learn.

Lorraine seemed a little uneasy about the fact that she has no experience on the computer. Sue Ann quickly told her that all of us had to start somewhere... and that I was the best person to help her get going! Lorraine feels that if this program can get her to use her word processor at home, it will be well worth the effort. I told her that if she brought the machine to school, I would help her to get started on it so she could practice her typing at home. She thought that was a neat idea. She just needs a boost to get started.

*

Discussion Questions

1. How do you plan to conduct your first meeting with your proteges? What items will be included on your agenda?

2. What type of relationships and communication patterns would you like to establish with your proteges? How might you "set the tone" early on to develop the relationships you desire?

3. How might you detect the presence of a "computer-phobic" among your proteges? What are some ways you might defuse beginners' fears?

***

Chapter 2: Logistics

Case: **The Incredible Shrinking Schedule**
Mentor: **Louise**

When I chose Betsy as a protege, I realized that she was already very computer literate. But I knew that she had never used the computer lab with her class. I hoped that her involvement with the program would improve her classroom management skills and allow her to take her class to the lab.

What I didn't count on was Betsy's hectic schedule. Her students are extremely difficult to handle, and she is feeling stressed out. In addition, her mother is ill with Alzheimer's disease and has recently moved in with Betsy and her husband. With all that she has going on, Betsy suffers a lack of enthusiasm and has a hard time remembering to come to our meetings.

I tried to interest Betsy by allowing her to devise her own Individualized Mentoring Plan (IMP). The program she designed was extremely short and lacked detail. I adapted the IMP to her ability level, and she now has more areas to explore and become interested in.

I've also encouraged her to reach goals by ordering software to preview. One program she wished to see was a complete dud, but she has investigated others in house that interested her.

Betsy seems to be more successful in meeting goals when given a deadline. I also provide her with reminders both the day before and then on the day that a meeting is taking place or an assignment is due. These methods seem to be effectively increasing Betsy's enthusiasm about the project, as well as improving her commitment to it.

Challenge

One of the biggest areas of concern for both mentors and proteges is logistics. Getting everyone together can often be difficult. Committee meetings, outside obligations, and the everyday demands of teaching conspire to erode available time and energy. Limited computer resources and lack of substitute teachers are also common logistical concerns.

With so many demands on their proteges' time, some mentors have found it necessary to remind them of their responsibility to the relationship. Making mentor–protege activities a priority is vital to the success of this relationship.

Limitations on available computer equipment and substitute staffing often lead mentors and proteges to creative solutions. Again, other mentors are a good source for ideas.

Related Mentor Experiences: One Hundred and One Details

Kelly:
Today, a couple of management questions came up. The concerns are the same for all of us: How do you fit your 26 students in a lab with only 24 computers? How do you get the computers ready quickly? What should be the rules of the lab, and how should they be presented and enforced? We discussed these problems to some extent. I'm going to take each of my proteges' classes into the lab once to show my proteges an example of what can be done in the lab. That will hopefully help with some of our management questions.

*

Dorothy:
Once you get hooked on the computer, you want to use it frequently. The limited availability of the computer lab has been a problem for my proteges.

A block schedule has been set up for each grade level. The upper grades have access to the lab in the afternoon but are not able to use it in the morning for reading. After Monday, anyone can sign up to use the lab. The problem is that some special times are being given away without discussing it with other potential users first. My proteges take classes to the lab weekly but have had their times given away prior to the deadline.

There are several possible solutions to this problem. First, we need to communicate openly with the principal, who is giving the times away. Secondly, advance planning by lab users is necessary to successfully coordinate lab use. Finally, of course, a second computer room would be terrific!

*

Karen:
On Thursday morning, I had two Apples on carts in my IBM lab and three teachers who wanted to use the Apples. The following Monday morning, I had no Apples at all; they were being used in individual special education classes.

*

Melanie:
Although I have been using the IBM lab two days a week with my math class, I have not been able to schedule time during English and Reading. Our lab aide is busy substituting and working on a video for the Middle School Video Contest. I've asked her to help me pull up student reports. She's too busy.

*

Sharon:
Meeting time is a problem for all of us. Carla and I talk a lot about stuff because our rooms are across the hall from each other. I really have to make it a point to visit my other protege.

*

Dorothy:
An official meeting was not held this week. Each protege had testing meetings after school. My car had big trouble, and I had to ride home right after school each night with a staff member who lives near me.

*

Sharon:
I'm really beginning to feel behind. I have many commitments, and want to do a good job at all of them. My proteges have many other "jobs" also. We have not been able to connect as often as we'd like, but I'm glad it is not one-sided. We grab time when we can.

*

Kelly:
Boy! What a day we just had! We need to get our computer software organized. I checked in the morning for *AppleWorks* and *The Pond*, and then they weren't there later for class! So, being the flexible teacher that I am, we previewed *Oregon Trail* instead and discussed how to use it.

Once we got settled, class was fine. It is so frustrating when the lab is not set up the way it is supposed to be. I was organized and ready to go, and then, because of the lab's disorganization, I looked unprepared. I'm really trying to make my mentorship successful.

*

Dorothy:
Another week of complications... this was science fair/health week. Two of my proteges and I are on the committees for the fair. On Tuesday, we set up for the fair. The fair took place on Wednesday, and Wednesday night was parent night. On Thursday, we were too exhausted to meet.

*

Dorothy:
The best laid plans of mice and men! I spent two hours yesterday organizing substitutes for Helen and me, as well as arranging with other teachers to observe Helen as she teaches their classes. (The French class cheered when I told them Helen was going to take them to the computer room for math word problems. They have only been to the computer room once this year!)

Well, today there are no subs. It seems that no one wants to sub for the upper grades. I spent another hour this morning running around asking each teacher if she would cover Helen's class while Helen takes each of their classes to the computer lab. I eventually got it all worked out. You just can't disappoint the kids. This wasn't the most beneficial arrangement for the teachers, but the kids had a great time in the lab!

*

Kelly:
One big problem I have faced during this program has been the search for substitutes. The available substitute time for this project was super to have, but because there are so few subs that are willing to go to the older classes (or even to the younger classes), I have been unable to use the time fully. One of my proteges hasn't been able to schedule time in the lab with me because of the lack of substitutes. Is there any way to solve this problem? We have tried creative staffing.

*

Dorothy:
It has been wonderful for the primary teachers who have been part of this program to be able to get subs to role model, observe, copy and help. However, the lack of substitutes at the upper grade levels was frustrating for me and two of my proteges.

One possible solution to this problem is to use upper grade sub money to get a sub for a primary teacher, who in turn will substitute for the absent upper grade teacher.

*

Sharon:
I had great plans to get caught up over spring break — ha ha! I did the reading but not the writing. We talked about getting together at Carla's, but could not find a day we were all free!

*

Louise:
Why did I choose as proteges the two people in our school who are engaged to be married and involved in numerous activities? Neither protege made it to our Wednesday meeting. I left notes in their mailboxes reminding them of our obligation and the necessity of the meeting.

*

Karen:
It is difficult to coordinate meetings with proteges whose personal lives are so busy. Amy has missed the last three meetings due to appointments for her elderly mother, and is dropping out of the program. (This is a real shame, since she has already been taking her classes to the lab by herself and has been very appreciative of all the help she has received from me.) Julie will be unable to attend our Monday meeting. She is a single parent with two young children and often has obligations with them.

*

Sara:
I'm already seeing time as a problem. It is difficult to coordinate the schedules of five people (four proteges and one mentor). I have had to see them as they are available. This solves the immediate problem of getting together, but I have to repeat the same information several times. It is not very efficient.

I am having a problem dealing with my proteges on the issue of getting together. I have difficulty setting a meeting time with them without feeling apologetic that they have to come early or stay late. The way I have chosen to deal with the problem is to stick to our set time. It is not fair to any of us when I come running whenever they call throughout the day.

*

Sara:
Things have gotten somewhat better with the scheduling issue since I began working with my proteges. I think it is mainly due to a change in my attitude. I have to convey to my proteges that I believe the work we do is important. I also must state expectations without apology. After all, people take college and workshop courses all the time. They know when they sign up that they must set aside the time necessary to fulfill the course requirements. I should expect the same from my proteges.

*

Eileen:
There are a couple of things that I do as a mentor to make this program a priority for my protege. The most important thing I do is to demonstrate that I am totally committed to this venture. I do this by keeping my word and doing all that I say I will, and by taking the project seriously. Once I have made my level of commitment known, I try to obtain the same level of commitment from my protege.

Another thing that I do to ensure that our work is a priority is to make sure the benefits of being a protege are worthwhile. I do this by inviting my protege to attend specific class sessions that are of interest to him and sharing my class notes and other useful information with him.

*

Jean:
My proteges have really been committed to the project. I attribute this to the fact that we always engage in activities that are related to priorities in their teaching.

*

Dixie:
It's tough to get proteges to stick to a meeting time. Something is forever coming up. I think it helps to remind them a day ahead of time. I have also found that having a written agenda helps.

*

Pam:
My proteges and I take turns bringing refreshments to our sessions together. This helps motivate everyone to attend the meetings, and makes the time that much more enjoyable!

*

Discussion Questions

1. What are some logistical concerns you anticipate that you and your protege group may encounter? How might you address these problems?

2. What can you do as a mentor to make the mentor–protege relationship a priority for your proteges?

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Chapter 3: The Importance of Administrative Support

Case: **Principal Perks**
Mentor: **Randy**

Throughout my years as a computer coordinator, I have been very lucky to have principals who understood the contribution technology can make to the school and helped make it a priority. At times, their support was a pleasant benefit that made my job easier and more enjoyable. At other times, their support was an absolute necessity that my job would have been impossible to perform without.

I have been fortunate to receive the time and flexibility needed to increase the technological expertise of an entire school. My principals have always allowed me the time to provide inservice training to teachers on the computers. These sessions have proved worth their weight in gold. I have been able to address many common questions at these meetings. Eliminating teachers' initial concerns about technology has led to a general excitement about its possibilities.

I have also been given time to meet with teachers individually to help them solve computer problems or to show them new ways in which technology can help them. Teachers appreciate this one–on–one attention and are more likely to take risks with their learning if they know that I am available if they need me. In addition, I have received the flexibility to go into classrooms and model scheduling, word processing, and specific software skills.

When it has not been possible for me to help teachers directly, I have been able to bring in outside resources. Support personnel from our school network system as well as members of our county computer trainer department have assisted at my schools. They have not only been available for me and the teachers, but have worked directly with students as well.

I feel strongly that the support my administrators have provided me has made all the difference in the success of my job. They have identified technology as a priority by allocating time and resources to it. School personnel have followed their lead, to the benefit of everyone.

Challenge

Mentoring is a complex relationship that requires time and commitment to develop. In the context of the busy school environment, this time can be difficult to find. The responsibilities and prior commitments of two busy teachers can easily interfere with the time needed to develop a healthy mentor–protege relationship. The answer? Don't try to do it alone!

The support of the school administration can make an enormous difference in the ability of mentors and proteges to focus on their mutual goals. Principals who promote mentoring within their schools allow their teachers the flexibility needed to fit in important meeting times and to access the resources of the school. A cooperative administration can quickly solve unexpected problems as they arise, or help avoid them altogether.

Administrators should not make the mistake of perceiving the computer mentor teams within their schools as one or more special interest groups. The truth is that the mentoring process can and should benefit everyone in at least two ways: through the expansion of teachers' technological skills and the growth of a valuable form of information sharing. Executives who recognize this potential and help sponsor it are most likely to reap rewards for their entire school.

Related Mentor Experiences: Help From On High

Elena:
Between myself and my three proteges, it has been a struggle to schedule sessions together that do not conflict with other activities. One thing that has really helped has been the involvement of our principal.

The biggest problem we were encountering was that we would work and work to finally find a meeting time, only to be "bumped" by the subsequent scheduling of some other activity at school. When I mentioned this to my principal, she came up with a solution. Now we notify our principal of our mentoring meetings, and she has the secretary put them on the school calendar. Other meetings that come along have to be scheduled around us!

*

Pam:
Meetings, meetings, meetings! Today I had to miss meeting my proteges at the regular time because I had to attend an emergency School Based Management Team (SBMT) meeting. I couldn't sneak our time in before the SBMT meeting because of the regular monthly meeting of the language arts teachers. Frustrating!

I spoke with the principal after the SBMT meeting and told her my dilemma. We worked it out so that if in the future the two meetings conflict, I will be late to the SBMT meeting and our mentoring session will go on as scheduled.

*

Susan:
I have been lucky to have the support of the administration in getting computer technology off the ground at my school. As a result, there is more that I can do when teachers encounter problems, and so I think teachers feel more comfortable trying technology.

Recently, we had problems with the upper grades using the writing processor. I was able to bring in a representative from the network company and a member of the county's computer instruction staff. They met with each class and directly instructed them on the program.

Whenever teachers have special requests, I have the freedom in my schedule to go into their classrooms and work with their students. With the support of the principal, I have even started a Computer Committee. The Committee has representatives from each grade level and specialty area, and meets each month to review reports and go over scheduling problems.

*

Alice:
What a rotten situation we are in! When I began working with my proteges, I asked them whether they would prefer learning about Apples (on carts) or Macs (in the computer lab). I was relieved at first when they said they wanted to learn the Mac, since that is the computer I am more proficient on. At the time, I did not realize what a big problem it would be to get into the lab to work.

We had planned to meet on Thursdays after school in the lab for our mentoring sessions. The problem is that our lab coordinator, Mrs. Burke, will only let us use the lab on every other Thursday — at exactly the same time the Computer Club uses it! Every other night she locks up and leaves right after school, and simply refuses to let us stay by ourselves.

I'm feeling extremely frustrated at this point. When I told my proteges what had happened, they agreed to spend our meeting time today on the Apples, even though that is not where their real interest is. Two of them said they would continue working on the Apples if that was all that would be available. The third decided it wasn't worth her while.

I asked my proteges for advice on the computer lab situation. They feel I should talk to our principal. I am reluctant to do this because I'm afraid it can only cause hard feelings and future difficulties for me and my students in the lab. Besides, the principal has not had any involvement with our project and I'm not sure that he would feel this is important enough to do something about. Any advice?

*

Chris:
Since I have only one protege, I have not had to deal with some of the problems that other mentors have discussed, such as acting as the negotiator or peace keeper for the group. However, I do wish the principal would show some interest in what we are doing. I feel he should at least come down to see what we're up to once in a while, if for no other reason than to show support for his staff member protege. I'm beginning to feel that our program is not a priority for him when it should be.

*

Alice:
Update on the issue with the lab coordinator: Today Mrs. Burke informed me that she has arranged for a special security system to be attached to the lab so my proteges and I can use it when she is not present. She stressed that this was done AT HER EXPENSE. She went on to tell me that whenever *she* has taken a course through the university, she has used the university's facilities to complete the requirements. The implication was clearly that my group should do the same, even though it flies in the face of the whole purpose of the mentoring program. Apparently Mrs. Burke also considers my group inflexible, since we were not willing to change our meeting days from week to week based on when she could stay late at the lab.

I am so disappointed that this situation had to result in hard feelings. Maybe if we had gotten the principal involved from the very beginning, he could have explained the program to Mrs. Burke and we could have made the necessary arrangements in advance. Perhaps she would have even gotten involved, and mentored me while I mentored my proteges.

*

Malcolm:
I feel strongly that if the mentoring program (or any program like it) is to succeed, it requires a commitment from management as well as the teachers involved. We need the help of principals and superintendents to overcome the many barriers to participation that exist.

I hear over and over again that it is tough to meet regularly with proteges, that the time factor is impossible to overcome, and that both mentors and proteges have so much to do that a regular weekly meeting time is impossible. I face this problem every week. My fellow mentors have said that they do too. It has been singled out by many as the primary obstacle to a successful mentorship. I believe that the active involvement of administration presents one possible solution to this problem.

Ideally, school management could see to it that mentors and proteges are given time during the school day to work together. This would free program participants up to concentrate on more important tasks than nailing down meeting times, and would enable mentors and proteges to visit each other's classrooms to see and experience the use of computers with students in different situations. At the very least, mentor meeting times outside of the school day should be respected by the administration, so that these meetings are not constantly overridden by the scheduling of other school-related meetings.

*

Dixie:
I believe that a course like this should be required of all principals and vice principals for mentoring to really work. Administrators cannot effectively promote new technology if they are uneducated or phobic about it in the first place. They can't support those who have the knowledge and wish to pass it on if they don't understand the benefits and savings that can result. Formal or informal mentoring can only succeed if the climate is favorable and the administration supportive.

*

Discussion Questions

1. How do you feel the administration can make a difference in the success of mentoring in your particular school?

2. What can you do to involve the administration in your mentoring? How can you cause your school's management to buy into your mentoring group's goals and help you to achieve them?

***

Chapter 4: Protege Attitudes Toward Being Mentored

Case: **The Uncooperative Protege**
Mentor: **Rachel**

Mary is a teacher who serves the first through sixth grades. She has a very negative attitude toward school. The principal had suggested that Mary might benefit from the computer class and, although uninterested, Mary felt that the principal's wishes should be heeded and agreed to become a protege. I had hoped that by including her as a protege in this project, I could spark her interest and motivate her to have a more positive approach.

As each week has gone by, however, I have grown more baffled and concerned. Mary's negativity appears to be a much greater problem than I had realized. She frequently falls asleep during our meetings and sees nothing wrong with it. Even more disconcerting is her approach to her students.

One day, I took Mary and her class into the lab to model a lesson. Mary's behavior was shocking. She sat back in her chair, refused to interact with the children, and muttered such comments as "They're so lazy" and "Have you ever seen such lazy children?" under her breath. I was astonished and deeply discouraged by this experience.

Mary's negative attitude has a profound effect on our mentor-protege group as well. Since she is so disagreeable, the other members of the group (myself included!) feel more comfortable when she isn't present.

I have tried to interest Mary in a variety of programs and ideas, but she wants to know everything without having to work at it. My other two proteges have made such remarkable progress in enthusiasm, interest and comfort level that they are now taking their classes to the lab without me. I wish I knew how to hook Mary.

Challenge

The attitude of the protege can make all the difference to the effectiveness of the mentor-protege relationship. And protege attitudes run the gamut. Occasionally, a mentor must make repeated attempts to discover the right approach for working with a difficult protege.

Even with the additional demands on their time, most proteges are extremely positive about being mentored. They look forward to improving their computer and teaching skills within the supportive framework of the mentor-protege relationship. When proteges are enthusiastic, the relationship is easier to launch, and they will learn and apply their new knowledge more readily.

A few mentors have reported situations of negative and uncooperative proteges. These situations tend to involve single individuals, but even one disgruntled protege can be destructive to the progress of the entire group.

Fortunately, reluctant proteges often feel more positively about being mentored once they have experienced some of the initial benefits of the relationship. Improved computer expertise, increased teaching options for their own classrooms, and a mutually supportive network for questions and concerns are considered strong advantages by most proteges.

Related Mentor Experiences: Lions, Mice and Mentoring

Karen:
Two of my proteges are special education resource teachers, serving students in kindergarten through sixth grade. They were both very reticent at first about participating in the mentor–protege program. They complained that their schedules were too full as it was, and one had family responsibilities which interfered with the after school meeting time.

As the program got underway, and they were exposed to the computer's possibilities, both proteges became very interested. Suddenly they couldn't know enough! Suddenly they almost always had the time they needed to learn about computers.

By the time we were winding up our mentorship, my special education proteges were completely involved. They had taken what they had learned in the course and gone even further on their own! When the course began, no special education students were using computers. When my proteges got involved in the class, they passed their new knowledge on to the other special education teachers. Now all special education students are using the computers! That's more than 80 kids!

*

Kelly:
At the start of the mentoring project, one of my proteges was less than happy to be a participant. After she had explored different software programs and computer applications through class assignments, her attitude improved considerably. My concern now is to find ways to continue fostering her positive attitude toward technology once the program is over.

*

Rachel:
At our last meeting, we discussed the lessons I would be modeling for each of my three proteges' classes in the computer lab. Each protege was to have selected a piece of software to be used in the lesson. Cathy chose *Circus Math* to do with her students. She is very excited and eager about her class going into the lab. Dawn chose *Top Reader's Club* for her group of three fourth graders.

Mary said she didn't care what software we used for the lesson. I explained to her that she knew the needs and abilities of the students she would be bringing to the lab, and that *she* needed to select the appropriate software.

I am having the most difficulty with Mary. She seems to have a general "I don't care" attitude about everything. I realize I can't change her feelings regarding everything, but I was hoping that this project would be something for her to become enthusiastic about.

*

Karen:
The day before my proteges and I were to have our first meeting, I was working after school in the computer lab. Jane, one of my proteges, stopped by to ask about a printout from a student program. I logged her into the program under a student's name, so that she could evaluate it from the student's perspective. I think this was her first time to really log into a student's computer and actually do what they do.

Jane also wanted to know what I was working on. Since I was formatting disks, I explained how formatting was necessary to prepare a disk to receive work in much the same way that a typewriter must be prepared by having paper inserted into it. I had her practice placing the floppies into and removing them from the drives.

As we worked on formatting, another of my proteges stopped by. Sally wondered what we were doing, and I explained the formatting process to her. Then she and Jane helped me to format disks. When we were finished, I gave each protege a sample disk to try out on their own.

All this took place the night before the actual assigned first class!

*

Discussion Questions

1. How would you characterize each of your proteges' attitudes toward being mentored? In what ways might their attitudes help and/or hurt your work together and the progress of the group as a whole?

2. In the case cited at the beginning of this chapter, a mentor wonders how she might "hook" a protege who has a very negative attitude toward being mentored. What suggestions can you offer her? If you were the mentor in this situation, what might your approach be?

3. Under what circumstances might the mentor–protege relationship not work?

4. What are the implications for mentoring when a protege joins the group out of compliance with a principal's wishes?

***

Chapter 5: Protege Attitudes Toward Technology

Case: **Computer Phobia**
Mentor: **Rhoda**

On the first day that I met with my proteges, they were anxious to begin. They had a lot of questions. Many of them expressed a strong fear of working with computers, especially Alice. She was very unfamiliar with computers and felt uncomfortable with the idea of structuring her lessons around them.

I listened patiently to the fears expressed by Alice and others in the class. Then I addressed their fears directly. To demystify the concept of "technology," I made examples of technology that we use in our daily lives. I discussed microwaves, answering machines and VCRs. Alice continued to express her apprehension. Finally, I compared a computer to a regular typewriter, going over the keyboard and explaining the basic differences. Alice broke into a big smile and said, "I never thought of it that way. I feel better now!"

Challenge

As with their attitudes toward being mentored, protege attitudes toward technology can vary widely. Some proteges are "old hands" at computers, viewing technology as a staple resource. Others are in unfamiliar territory, perhaps even using computer technology for the very first time.

Proteges who are unaccustomed to technology are frequently apprehensive about their new endeavour. The strange terminology and lights and buttons of a networked system can be very intimidating. Inexperienced proteges are also sometimes afraid that they may harm or break the expensive computer equipment.

Proteges' fears are barriers to the effective learning and application of computer knowledge. Some mentors have discovered that the best way to quell proteges' anxieties is to get them started on the computer right away. With encouragement, guidance, and a little hands-on experience, most nervous proteges overcome their fears and enjoy exploring the computer's capabilities.

Proteges with computer experience pose different challenges. They may appear more knowledgeable than they really are, sometimes feigning competence at least equal to that of the mentor. This behavior may be intimidating to the mentor, who enters the relationship expecting to be the more proficient. The mentor's attitude may need to change to that of co-learner with the protege.

In some cases, a protege's know-it-all behavior camouflages an underlying lack of confidence. The mentor must find ways to break through this coping mechanism. In other cases, a protege's "experience" may be limited to one area, such as word processing, using software that requires little or no computer expertise, or using only one computer brand. Here, the protege may be able to identify new areas of technology to explore during the development of the Individualized Mentoring Plan (IMP).

Related Mentor Experiences: Lions, Mice and Technology

Karen:
One of my proteges, Sheila, has been doing *AppleWorks* for years. She has a computer at home and puts all of her lessons on it. She has even made a database of her students, with phone numbers, parent names and addresses. I was a bit intimidated when she asked to join the computer mentor program.

At our first meeting, Sheila brought in her copy of *Print Shop* for another protege, Holly. Holly is very computer phobic, but she wanted to use *Print Shop* to make banners for her classroom. I was busy helping another protege, so Sheila offered to help Holly with *Print Shop*. They set up the banner but couldn't get it to print. They could see that the printer was turned on and hooked up to the computer. Sheila, who was used to using an Imagewriter printer instead of an Epson, couldn't figure out what the problem was.

I came over and asked if they had set up the printer for the Epson. Sheila didn't know what I was talking about. I explained how printers are parallel or serial, and how the interface card allows the printer to "talk" to the computer. Sheila thanked me for explaining it all to her. She said her son had set up their computer at home and she had not had to do any of this before.

*

Louise:
I've managed to "snare" two staff members to be my proteges: Betsy, a first grade teacher, and Janet, a kindergarten teacher. Both are friends as well as colleagues.

Betsy knows quite a bit about computers and has begun researching and viewing software available at our elementary school. Janet, however, is deathly afraid of computers. What a difference. This will be fun!!

*

Sharon:
Poor Luke! He had been working so hard on an authoring program. I showed him how to use *Study Guide*. He liked it so much, he had already completed a dozen sets of questions for his science classes. When he went to the computer to print his final set of questions, he got the dreaded message: "Bad disk."

I couldn't fix anything, so I asked colleagues more experienced than me, but they couldn't fix anything either. The only solution was to retype the questions using another disk. Luke took this news well and did just that.

This was a time that I felt badly about the problem, but all I could do to help was to be there and not let my protege get too down about the use of technology. Luckily, Luke had already seen the benefits of computer use and just took this setback in stride.

*

Louise:
What we had planned to do today got thrown off track, so we did other productive things instead. Betsy used *AppleWorks* on a single–disk drive computer and played around with the word processor program. Janet, on the other hand, seemed lost. Her fear of computers had paralyzed her.

I told her the best thing to do to get over her feelings of intimidation was to take a computer apart and put it back together again. I took one apart and told her to "go for it." Her mouth dropped open, her eyes bugged out. She stammered, "Not, not, not me!" I told her to look at the plugs and "plug–ins" and see what would fit together. Then we named each part. I had her look at the computer Betsy was using and told her to "make it look" like that one.

It took about five minutes, but she did it! But when we turned it on, nothing showed on the screen. The drives were whirling, but there was nothing on the monitor. Janet broke into a sweat. "I've broken it!" she said. I told her it had to be something simple, and to retrace the steps she took in hooking everything up. When she did this, we found that the monitor cord hadn't been replaced. Once it was returned, POOF – the screen lit up and so did Janet!

*

Malcolm:
I am teaching my proteges spreadsheet and database programs. That would be no problem if everyone were there to take instruction at the same time. As with any group of people, some do not make it to every session and they miss what I teach. The real problem is that they do not then go and investigate on their own, but depend entirely on me. I'm really surprised by this, since my proteges are all experienced computer users. They rely on me to teach them every little thing, step by step. They are afraid to venture off and experiment on their own.

*

Jean:
I am having some concerns about the way one of my proteges views the use of computers with her students. She takes her special education students into the lab every Friday to reward them for working hard during the week. They only play computer games. My protege says she enjoys using the computer as a reward system only, and she doesn't seem interested in using it as a learning tool.

*

Dixie:
One of my proteges has a stand alone IBM computer in her classroom, but has no experience on the network. She uses the computers as a reward with her students, but has not included them in her instructional program. They are more of a "fun" thing to her.

*

Malcolm:
I have an unusual problem. Most of my fellow mentors are working with less informed proteges who have more to learn. I mentor more experienced proteges. Unfortunately, they do not feel the necessity to work one hour a week on something at which they already consider themselves proficient. Their attitude toward technology is that they already know the basics, and will just ask questions and seek advice whenever it is needed.

*

Rita:
I have one protege who is really deathly afraid of technology. So far I have used the strategy of pairing Della with another protege to allay her fears. During the session when we worked on *Print Shop*, Marti had already done it, so I had her teach Della while I manned another station. Suddenly, we were called away to an emergency meeting; Della stayed behind. On the way out, Marti encouraged her to read the prompts on the screen and continue with the card they were making.

When I returned 15 minutes later, Della had not done anything. She was afraid to proceed; she said she was afraid to go on because she might mess up. This surprised me, but gave me tremendous insight into her fears. I sat with her and we did it step by step until Marti came back and worked with her some more. I feel that repetition and very small steps would be the most effective approach with Della.

*

Malcolm:
I think the best way to alleviate fears about technology is to take an easy program and get the frightened individual up and running, producing something with the technology that was beyond their capabilities before. *Print Shop* is especially good for this. Teachers can make banners and signs without worrying about hardware or networking. Once the technology has worked, the natural curiosity of the teacher takes over and leads the individual toward the more complex mysteries underlying computer technology.

*

Discussion Questions

1. How will you assess your proteges' attitudes toward technology?

2. What would you do to alleviate a protege's fears about technology?

3. What special challenge might you face with a protege who is very computer literate? How might you deal with these challenges?

***

Chapter 6: The Mentor–Protege Relationship

Case: **An Effective Mentoring Relationship**
Mentor: **Melanie**

I feel that my relationship with my protege is very successful. What makes our mentor-protege relationship work is a sense of mutual trust and respect. We share our philosophies on education and classroom management. We work effectively as a team both in and out of the classroom.

I have found that one useful approach to showing Diane new things is to allow my students to help "teach" her. This accomplishes multiple purposes. Diane learns what she needs to know, and the student helpers feel good about having helped her to learn. In addition, the students see that learning is a continuous process, that even teachers don't know everything and must ask questions.

Diane and I were friends before our official mentor–protege relationship began. I often wondered if our prior relationship interfered with the transfer of computer literacy. Perhaps a more productive interaction would have been for mentor and protege to be less familiar and more formal. At the same time, I felt that the underlying existence of our friendship was a strong foundation for a mentoring relationship.

> ***Challenge***
>
> *Central to the entire process of mentoring is the mentor–protege relationship. This is a unique relationship, with no single recipe for success. There are as many potential types of successful mentor–protege relationships as there are mentors and proteges. Part of what makes a successful mentor–protege relationship so effective is this consideration of individuality.*
>
> *Successful relationships may vary, but all share certain common ingredients. Mutual trust and respect exist in all successful mentor–protege relationships, as well as a commitment by both parties to make the relationship work.*
>
> *Often mentors wish to choose friends as proteges. The distinction between friendship and the mentor–protege relationship can make this an onerous venture. Redefining an existing friendship may be difficult or painful, and a mentor–protege relationship which has roots elsewhere may not be as effective as one created specially for a purpose. Friendship and mentorship share many characteristics, however, and it is not uncommon for proteges and mentors to develop strong bonds.*

Related Mentor Experiences: The Tie that Binds

Sharon:
Although I wanted to be a part of the mentor project, I knew I would not be able to start until after maternity leave. I approached two colleagues, who are also close friends, and discussed the project with them. They were both eager to learn how to use the computers with their classes and willing to become my proteges.

Choosing friends as proteges works, but it does have its drawbacks. When people come to you for help, the responsibility or option to continue the relationship lies with them. When you solicit students, however, it's up to you to foster the relationship. This can be very tricky when dealing with colleagues who are also friends. Other professional commitments interfere with meeting times and it can become uncomfortable having to remind people of their responsibility to the program. It also becomes very easy to put off the business at hand and just visit. I have found that if you set up guidelines in advance, these problems should be minimized and the situation beneficial to all.

*

James:
I encountered a situation where one of my proteges became too dependent on my help and very demanding of my time as a mentor. Although I frequently explained and demonstrated for the protege, he insisted that he was unable to use the software and that something was wrong with the hardware.

To put him more at ease, I promised the protege that I would be present when he took his class to the computer lab. Then I took him to the lab and reviewed the procedures for loading and demonstrating software. I explained what was necessary, and the protege did all the work manually, so that he felt more comfortable with the manipulation of the hardware and software. Together, we observed that nothing was wrong with the system, and that it was a matter of using the commands and procedures correctly. The protege gained confidence from this one–on–one contact and supervision, and was later able to perform all the necessary procedures to boot up the software and complete his presentation to his students alone.

*

Sara:
I am new to my school, so I am grateful for the opportunity to get to know people better. I am hoping to develop some relationships as a mentor that will extend beyond the project.

*

Eileen:
My protege and I finally met today after several cancellations. Unfortunately, he has experienced three family deaths recently, and has been out of town or unavailable to meet. Today's meeting was very productive. We revised our IMP to reflect goals that will be more realistic for us to carry out at this time.

Our conversation then took a more personal turn as Roger began to share his experiences and feelings about the last several weeks. We talked about coping when close relatives die. Computers or technology didn't come into the conversation, but I felt as if I was doing some sort of mentoring because I could relate how I felt when each of my parents died and provide "tips" on taking care of business, dealing with grieving, and other related issues. We agreed that we will get together again before spring break to continue our computer work. I feel that today, just being there for my protege was what he really needed.

*

Sara:
I had a funny experience today. One of my proteges sent me a note saying we needed to "talk about the program." I assumed she meant the computer mentoring program, since the project has been the basis of our relationship.

It turned out she was acting as the team leader of her grade. I am also team leader of my grade. She was bringing complaints from her team to me. She wanted to talk about the school program.

I had been excited when I got her note. I went as soon as I could. I wanted to help her with her computer questions. When she told me her real intent, I was disappointed. I am team leader only because no one else wanted the job, so I'm not that comfortable in the role. She was very nice, but I was sorry that at least temporarily our relationship had changed.

We always have fun in our mentoring sessions and informal sharing times. This discussion wasn't fun.

Our mentoring relationship may have helped, however, as we worked together to reach possible solutions to the problems she presented. I believe, if not for mentoring, I might not have known her at all. Since we know each other through mentoring, we felt compelled to work the problems out without hurting each other or our teams.

*

Discussion Questions

1. What types of relationships would you like to develop with each of your proteges? How might these relationships differ according to each individual protege?

2. What are the important characteristics of the relationships that you would like to develop with your proteges?

3. What methods might you use to foster each of your mentor–protege relationships?

4. What problems might you encounter in transforming a friendship into a mentorship? How would you deal with these problems?

5. How will you select your proteges?

***

Chapter 7: Mentor's Role

Case: **Mentor as Learner**
Mentor: **Dorothy**

Over the last several weeks, a number of teachers have had difficulty with the data disks in the computer lab. For some unknown reason, saved work was getting lost.

When my proteges and I met on Thursday, Carrie wanted to use the printer to print out some of her children's work for the science fair. But when she attempted to retrieve the work, it was gone. I had no idea what was causing the problem, so I found Gina, a teacher with a lot of computer experience.

Gina had helped me with computer problems before, and she came to the rescue again. She showed all of us how to use the utilities disk that went with the program we were using. The disk showed us that our data disks were damaged. We don't know how or why the disks became damaged, but many teachers have lost work. I will bring my own disks in from now on to see if it makes a difference. Another day of learning for the mentor as well as the proteges!

> *Challenge*
>
> *What does it mean to be a mentor? Those who have tried it have found that a mentor must take on a variety of roles, including teacher, learner, negotiator, and peacekeeper. Mentors must be available for support and understanding. They must also be able to motivate and constructively criticize. In short, mentors must be able to adapt their roles to meet the needs of different individuals and situations.*

Related Mentor Experiences: The Adventures of Supermentor

Lucie:
I did not anticipate the unique problems I would have to solve as a mentor. Right now, the problem that I am facing is that my proteges have such weak typing skills. This became apparent when we went over the *Spellevator* program. It took the proteges an hour to type in 10 words and sentences. I like to use *Spellevator*, but it doesn't take me long to type in a lesson. I'm very enthusiastic about this program, but I'm sure that my proteges aren't quite as enthused about something that requires so much advance preparation. I seriously doubt that they'll ever use it again or have the time to type in the lists ahead of time.

What should I do? I could suggest that they use one of the typing programs to brush up on their skills, but it would be hard for me to suggest that without hurting their feelings. Another option might be for them to ask an older child (a sixth grader) to help type in their words. Most of our students have very good typing skills, since our school stresses proper keyboarding techniques from first grade on. An older, responsible child might enjoy helping out a teacher with a project like this.

I am very enthusiastic about using many of the authoring systems that are available now. But here again, it helps to be a quick typist. I'm not sure if my proteges will ever really want to use anything that requires a lot of advance preparation in the form of keyboarding. As teachers, we have so much to do already that it seems impossible to add anything else to the list of "things to do." Perhaps I should focus on software that doesn't require as much advance keyboarding.

*

Dorothy:
During a recent meeting with my proteges, I asked one of them if she would like to see how the printer operated. Pat and I sat down together to print some work I had saved from my science classes. We tried and tried to send it to the printer, but to no avail. All kinds of weird things appeared on the screen. We tried another disk; it said it was printing, but nothing happened. Another mentor was in the lab, but she couldn't figure out the problem either. We finally gave up, deciding to concentrate on formatting instead.

That night, I had difficulty sleeping as I tried to work the problem out. I decided to try printing from another computer.

When I arrived at school the next day, I met another teacher not in our program but very knowledgeable about computers. I told her the problem we had had the day before. She told me that she had given me a new program, and asked if I had checked the printer settings. Of course I hadn't! We set the printer settings and presto – it printed!

Pat came into the building and I told her what I had learned. We just laughed! What more could you do? One half hour wasted in the lab and one sleepless night for something that should be automatic! You can see how much the "mentor" has to learn too!!

*

Martin:
When we first met, my proteges and I agreed that we would learn computer hardware and software as a group, and share a general Individualized Mentoring Plan (IMP). Since then, however, some feelings of frustration have surfaced.

In my role as mentor, it is difficult to satisfy all the needs and desires of my proteges. People do not always want to learn about the same topic. They may already know about it, or feel that it has little value, or that it cannot be applied to their students' needs.

Recently, something occurred that caused me to examine my ability to be all things to all people. One of my proteges indicated to me that she felt I was spending too much time with one particular protege, and not meeting her own needs as effectively. I felt it was important to act diplomatically in this situation. I told the frustrated protege that I would help her with any questions or problems she had. Acknowledging her frustration made her feel better, and restored her confidence in our work as a team.

*

Lucie:
My role as a computer mentor has evolved through various stages. I began as a trainer or guide, developed into a coach, a modeler, and an advisor, and finally became a supporter.

Our first couple of classes consisted of discussions of what we needed to focus on in the class, and I gave out a lot of information about hardware and software. We spent time just going over terminology. Since I led the discussions and I chose what we focused on, I felt like a *guide* or *trainer*.

For our next class sessions, I determined what software we would use. I felt that the proteges needed some software that would produce quick results and be highly motivating for them. *Print Shop* was a good choice for this because of its ease of use and its wide range of capabilities. Again I was assuming the role of a guide, but my role quickly changed as each person had the opportunity to try out the program. I became a *coach* as each person worked through the program. I encouraged each person without giving instructions, so that each person could gain confidence in using the program by herself.

As I demonstrated how I might use pieces of software with my class, my role changed again to that of a *modeler* of software. This was particularly true when a hardware problem arose. I went through troubleshooting steps, hoping that the proteges would see that problems can happen to anyone, and that there is usually a quick solution. In other words, I did not want them to panic!

As the class continued, I began to get in the habit of asking my proteges what pieces of software they had used each week with their classes. We would discuss what they had used and how well it had worked. We also discussed any problems that had come up while the class was using it. I gave advice about how to use the software that would be the most beneficial, and told about my own personal experiences with specific pieces of software. We looked for different software applications that would be helpful in their classes. My role here was that of an *advisor*.

Because of my involvement with the proteges, I feel a deep commitment to continue to provide help and support in future years. In this sense, I feel that my role is that of a *supporter*. At our last class session, I made it clear that, although the class was over, I would still be available to help my proteges with any computer-related tasks that they needed assistance with. I hope to continue to work with them next year whenever possible.

*

Lucie:
Mentoring has given me a new perspective on my role as a teacher. Since I have been given the opportunity to provide technical expertise to faculty and staff members, I feel that I have something important and unique to share with them. I feel that my responsibility is to help my proteges with computer-related tasks, but that I also have a responsibility to other staff members who need help. Before I became involved in this project, I really thought that most of my colleagues had computer skills similar to mine. I was surprised to learn that many of our staff members have very weak computer skills and rely heavily on our computer aide for assistance.

My role as a computer mentor has also made me realize how I can help less experienced teachers with other problems concerning teaching. For instance, one new teacher often comes to me to discuss things that are happening in her classroom. As I started learning more about the process of mentoring, I began to realize that I could serve as a mentor for this new teacher. I think in many ways I am able to provide her with assistance and ideas to help her with her teaching. I thought about some of the cases we studied as part of this class, and how often an informal mentor–protege relationship develops between two teachers. I hope I am able to help her. I have considered different ways to help her that are similar to what we read about. Sometimes it seems to help to just be an "ear" to her – to let her talk about her day, even if I cannot offer assistance. By the same token, I like to hear her ideas on how she has handled certain problems – it helps me to hear fresh and new approaches that I might not have considered. I never really thought of myself as a "mentor" before I took this class. It's nice to feel that I have some experiences and expertise to share with others.

*

Sara:
My role has changed drastically since last spring. Before, I was more uncertain in my new setting. Since September, I have learned that my proteges don't expect me to know everything. They are willing to learn with me or one step behind me.

*

Discussion Questions

1. Identify some of your roles as a mentor. Which roles are easiest for you to assume? Which are the most difficult for you?

2. How has your role as mentor changed since you began mentoring? In what ways might your role continue to change, and why?

***

Chapter 8: Protege Concerns with Behavior Management

Case: **Keeping Control**
Mentor: **Kelly**

Lois teaches language arts in a sixth grade classroom. Her students have a lot of behavior problems, and they are sometimes very hard to control. Since they are already quite difficult to handle within the classroom, Lois has serious reservations about taking them into the computer lab on her own.

Lois has thrived in the computer class. She has learned a great deal about computers and has experimented with many different pieces of software. But she is held back from actually applying her new knowledge by her apprehension over her ability to control her students' behavior in the lab.

We are getting ready to do our introductory lessons with our classes. Lois does not want to take her class to the lab unless someone else is there. How can I help her get over her fears? I have explained several types of behavior management, but it is still a block.

> *Challenge*
>
> *A number of mentors reported their proteges' misgivings about handling student behavior in the computer lab. The combination of novel atmosphere, student excitement, and teacher inexperience with the lab can be very intimidating.*
>
> *Sharing a variety of behavior management techniques is one solution to the problem. This may be accomplished one–on–one, or in a brainstorming session with the whole group. Modeling effective behavior management techniques will help proteges to see how different strategies work, and to become more comfortable using them.*
>
> *It may be helpful for the mentor to address the issue of behavior management directly, rather than waiting for a protege to express such a concern. Proteges may be reluctant to admit that they are worried about controlling their students' behavior.*

Related Mentor Experiences: Terror in the Lab

Rachel:
I was really amazed to discover how big a concern behavior management in the lab was for my proteges. It turned out that one of their greatest fears was that their students would be uncontrollable in the exciting new environment of the computer lab.

I realized that all the computer expertise in the world was not going to improve the odds of my proteges taking their classes to the lab if they were worried about their students' behavior. I decided that the best way to show them how to maintain control was to demonstrate it for them with their very own classes.

I took each of my proteges' classes to the lab individually and modeled a lesson. Whenever a behavior problem occurred, I dealt with it and kept the situation under control. Mainly, I taught the children the rules for using the computer lab. I assumed that other teachers not involved in the mentor program were probably as concerned about behavior management in the lab as my proteges, so I modeled lessons for several of their classes as well. Having seen firsthand how their students' behavior with computers really can be productive, the teachers and my proteges have said that they now feel more comfortable about taking their students to the computer lab.

*

Louise:
One of my proteges, Lee, has a rather large first grade class. Her 27 students are a potpourri of personalities, academic levels, listening skills, behavior problems...I could go on and on! Their behavior seemed okay at the beginning of the year, but things have gotten progressively worse. A number of conditions have combined to exacerbate the situation, including inconsistency in discipline and a number of significant events occurring in Lee's personal life.

Lee has proven to be a very effective teacher in the past, but has fallen off this year. I have tried many suggestions to address her difficulties in behavior management. Lee is a very soft spoken person, and never speaks sternly to her students. I suggested a more assertive approach and a modification or incentive plan. That seemed to work for a couple of months.

Since the announcement of a pregnancy, though, things have gotten worse. She doesn't seem to have the energy to be assertive or to try to be innovative in classroom discipline. It is almost as if she's given up.

When we take Lee's class to the computer lab, there are always certain children who *try her*, just because they know that they can get to her. I've suggested she pair students, separate students, take half the class at a time, or take half of her class and half of her partner teacher's class. Above all, I have suggested that she be consistent in her use of discipline.

*

Malcolm:
One of my proteges already has serious problems with managing the behavior in her own classroom. She is terribly disorganized herself, and as a result lets the students run amok. I have even had students come to me and complain about the chaos in her class.

I feel that I can teach this protege to use computers in a way that will help her get a grip on her classes and her teaching load. I am going to try to improve her classroom management skills by teaching her how to use database and grading programs. Along with these programs, I will help her to organize herself and eventually her students.

*

Eileen:
There are some basic guidelines that teachers should observe before taking their classes into the lab. Students should be told the procedures for working in the lab before they enter it for the first time. It helps to post charts and posters in visible places throughout the lab to remind students of the rules and expectations. Students should also be encouraged to ask for help from the teacher or lab coordinator whenever they're unsure of something.

*

Chris:
Teachers can make their trips to the lab successful if they have planned carefully. I would recommend that teachers be prepared with the following:

a) a well-planned lesson with a clear objective
b) the titles of the software programs each student will be using
c) personal familiarity with the software to be used
d) appropriate software settings or teacher management options customized for the students
e) any instructions the students will need to get started on their lesson (distributed before entering the lab, if possible)
f) any materials the students will need to complete their assignment

In addition, teachers need to remember that lab aides are not there to teach the class while the teacher takes a break!

*

Discussion Questions

1. How will you determine if your proteges have concerns regarding behavior management in the computer lab? How would you address these concerns?

2. What can you do to improve the classroom management skills of your proteges?

3. What specific management skills are needed for a computer lab, e.g., giving instructions, care of the equipment, etc.? What are some methods for addressing each of these?

***

Chapter 9: Technology and Troubleshooting

Case: **"I Did Everything Right, But..."**
Mentor: **Louise**

Janet met with her class today for the first time "on her own." She used her plans from last week using *Counting Critters*. She went to the lab to boot the program, and I brought her class up when they finished recess. Janet met us at the door and instructed the students to sit on the floor in a group. She was so self-assured...or so I thought. She turned to me and said, "I did everything right, but it just won't work. What should I do?"

We instructed the students to play "The Quiet Game" while we looked for the problem. I checked the master box, and even rebooted it. Nothing. Then we noticed a light on that usually wasn't on. It turned out that someone had changed one of the areas on the master box.

We fixed the problem and restarted the network. Since no one had used the lab all day, the computers were very slow in starting. One by one, they came on.

I enjoyed watching Janet with her kids. She went over our computer lab rules, telling the students that if they chose to get out of their seats or talk out loud, she would remove them from their computers. And she did! Those who broke the rules just sat on the floor near the windows for the remainder of class.

The students worked through three activities and thoroughly enjoyed themselves. Wow! Janet has really come a long way!

> ***Challenge***
>
> *Sooner or later, most of us will experience difficulties getting our computer technology to function properly. Mentors and proteges alike worry that the computer will refuse to cooperate at an inopportune moment.*
>
> *Some mentors have found that unexpected "glitches" may be frustrating or embarrassing but provide a good opportunity to model troubleshooting skills for their proteges. And, as one mentor said, it is important for proteges to know that "it can happen to anyone."*

Related Mentor Experiences: Are You Sure It's Plugged In?

Louise:
One of the most frustrating things in a computer lab is when the system shuts down or locks up. I sometimes feel like a bank or the military when things shut down during a busy time. Either the network locks up during a program (leaving the teacher with 24 active and inquisitive students), or the program takes *forever* to come on line. This has happened with my own classes and others quite often.

I needed to find a solution to this problem, so I asked another mentor to help. She gave me a listing of the product compatibility of MECC programs. The list was very helpful. I discovered that MECC programs have ratings which indicate their proper use. For example, our MECC programs have ratings of 1 (works great), 2 (not for use with more than five computers), or 3 (not for use with a network). This immediately explained why one of my programs had locked up; it was rated 2.

I made another discovery when I attended a class at another school. I found out that heat really affects the performance of computers, networks, and software. On warm days, our system acts up like crazy. The former lab instructional aide used to shut the lab down in hot weather!

I shared this information and the compatibility list with my proteges. To alleviate the heat problem, we placed a fan in the lab. We also began keeping the blinds closed and lights off whenever the lab is not in use.

*

Rachel:
We have encountered many technical problems throughout the mentor project, but the day I took my three proteges' classes to the lab was the worst. For the first group, Linda's kindergarteners, everything went fine. But when Cathy's second graders came in, we switched programs to *Circus Math*. The program loaded *very* slowly, never appearing on some computers and quitting unexpectedly on others. Cathy's students were very patient, which was a big help.

The rest of the day was more of the same...the network was slow, programs that had networked before suddenly wouldn't, and programs that did load would suddenly shut down. It was a very frustrating day, particularly when young students are in there. The wait time they experienced was unbelievable! I felt badly, because for many of them this was their first trip to the lab, and they were so excited.

We need to look into solutions to these problems. Possibilities include a different networking system and new software. We should look into the heat factor as well.

*

Lucie:
For today's class, we focused on learning *Print Shop*. Each protege was able to go through the steps for printing whatever she desired. The project took longer than anticipated, since we ran into problems with the printer. Actually, this gave us the opportunity to explore some troubleshooting techniques and to solve the problem together.

Later, I decided to give the proteges a list of steps for using *Print Shop*. I typed up a list of steps, including the basics for using the program and what to check in case of a problem. I think this will be helpful. The proteges seem to like the idea of having a piece of paper to refer to if a problem comes up again.

*

Sara:
I met with my proteges this morning to demonstrate *Appleworks*. It started off shaky. I couldn't get the program to run. I got another version from the office, but still no luck. Finally, I realized the power pad was still turned on and was interfering with the program. I felt stupid but relieved!

*

Bill:
Upon entering the computer room today, I found my proteges working on the computers. Ruth was writing an educational assessment, and Martha was developing a format for a therapy report. I asked if I could be of any help, and Ruth mentioned that she sometimes had trouble naming a file. I told her to call me when she was done so we could do it together.

Just then, Martha said she was having trouble with the same command. She said that as soon as the assessment format came up, she followed the directions to name and save it at that point. She then filled in the appropriate information for whatever student report she was working on. Later, when she attempted to pull up the student's information, the form came up empty.

I explained to Martha that she was actually saving a blank form, with no name or information on it. I told her she has to save the form after all the information has been entered, explaining that "you only save what you see." She laughed when she realized what she was doing!

*

Discussion Questions

1. What kinds of problems have you encountered with technology on your own? How have you dealt with these problem situations?

2. How can you alleviate your proteges' fears of equipment failure? What might you do to increase their confidence and their own troubleshooting abilities?

***

Chapter 10: Outside Experiences for Mentors and Proteges

Case: **The Maryland Instructional Computer Coordinators' Association (MICCA) Conference**
Mentor: **James**

The MICCA conference was a fruitful experience for me. I was able to see most of the *AppleWorks* presentation, then slip away to see the display on multimedia. (This was really great, since I was able to meet the presenter in person after having spoken with him several times over the modem.)

The multimedia approach was fascinating, and I hope to keep in contact with some of the teachers I met there. One of these teachers and I have agreed that we will work together to find a modem for my school, then hook our schools up. In exchange, I will help them with their foreign language board. I'll write to their students until our students can write to them via modem themselves.

> *Challenge*
>
> *Mentors are encouraged to take advantage of outside opportunities to expand their computer knowledge. Proteges often participate in these events as well. Previous activities have included the Maryland Instructional Computer Coordinators' Association (MICCA) conference and trips to Prince George's County's William Paca Staff Development Center and to schools for presentations on Integrated Learning Systems (ILS) and telecommunications.*
>
> *These opportunities give mentors and proteges access to new information about technology, and provide settings for valuable networking. Many mentors have found these experiences to be extremely worthwhile.*

Related Mentor Experiences: Beyond the Classroom

Louise:
The MICCA conference was the most inspiring two days for me and my fellow mentors. I feel free to say for them, "We learned so very much!" I attended the following workshops:

1. Desktop publishing
2. MUSIC, MIDI, and the MAC
3. Animation/using slide show
4. Science in the computer lab
5. Making a video yearbook
6. Using the computer to reach current objectives
7. Music and Multimedia (a layman's version of #2)

I learned so much!

Lucie:
Today, I spent some time sharing with my proteges what I had learned at the MICCA conference. I thought the conference was very meaningful, and I wanted to talk about some of the ideas that came from there and to project what the future holds.

We had a discussion about how much computers really are helping today's students and where some of the drawbacks are. My personal philosophy is that software will be improving so much in the future that computer users will have a hard time imagining what teaching was like without a computer. The simulation and problem solving capabilities are amazing, and I want my proteges to realize that educational computing is not just drill and practice worksheets placed on a computer.

I talked about the various pieces of software and hardware that I liked at the conference and summarized the workshops that I had attended. I had received some software to preview at the conference. After our discussion, we looked at the software and discussed whether it would be applicable to our needs.

*

Kelly:
We have enjoyed working on the final project for the mentoring class. But we could have done more advanced work on the project if we had gone to the MICCA conference earlier. There was a wealth of information at the conference that will continue to be very useful to us. I feel my proteges have come along nicely with this project.

*

Louise:
All of the Computer Mentor Project participants in my school met as a large group today to finalize the plans for our presentation in the last mentor class. Mentors and proteges alike met to give their input.

I only wish the MICCA conference would have been earlier in our project, so we could have applied more of the knowledge we were introduced to there.

Our presentation involved using a VCR, a videocamera, and a computer with a presentation program (*Slide Shop*). We connected the computer to the VCR and copied what was on the computer to videotape. This was a first for our school and for me! Sometimes we don't attempt something new unless we are either forced to or given a unique opportunity. Believe me, this presentation was quite an experience. What possibilities it holds for next year!

*

Dorothy:
Carrie, Helen, and Pat went off to the William Paca Center at 12:00 today to copy programs. (I was unable to attend since I was on my way to Connecticut.) I understand they had a great time. They copied 40 programs, previewing many of them. They formed an assembly line previewing, labeling, and copying, and reversed roles frequently.

Both Helen and Carrie have already tried some programs with their classes. Interestingly enough, even though rated networkable, these programs are very slow. We've decided to copy more of the same program and just use the copies to run the programs from individual computers instead of from the fileserver.

*

Karen:
Today, I went with my proteges to the William Paca Center. We had planned out in advance what programs we would like to make copies of. We copied about 25 disks; some were duplicated again and again. I wish we could have previewed more things, but we ran out of time. Some of the proteges said that they wanted to go back, since their planning periods were at the end of the day. Many proteges wanted to copy more disks. We plan to share some of our copies with each other at our next meeting time.

*

Marlene:
Today we began planning our presentation for the final class. I was surprised to find out how apprehensive my proteges are about getting up in front of other people and discussing what they have done. Our last meeting was full of excitement because they felt they had accomplished so much, but now they are filled with self–doubt. I asked them specifically what it was that was worrying them. They said they are afraid that other mentor groups might have mastered more complicated skills, and they will feel stupid by comparison.

It took us a long time to work on our script for the slide presentation we are planning to do. My proteges asked many times if they will be asked a lot of questions during the presentation. One is afraid she will use the wrong terminology. Another is worried that she will be asked to demonstrate on the computer. I just sat back and let them talk it out. I was curious to see how they felt about this whole course. It shocked me to learn that they are more concerned about embarrassing me by not doing grand adventures than by feeling embarrassed themselves. I tried to ease their minds by telling them about what the other groups of proteges have done — even though I actually have no idea! This made them feel better and we got on with our work. Before we knew it, we had spent two hours on our project. As it began to take shape, my proteges' confidence improved.

*

Susan:
After class today, I took a quick trip to Radio Shack. I wish I had made this a field trip for my proteges. They would have really seen me in action! Today I had to purchase a new cable but didn't know the technical name for the plugs I needed. I brought along examples of the plugs from some school equipment and explained that I needed "one of these" on one end of the cable and "one of those" on the other. The Radio Shack people were wonderful in helping me with my own limited knowledge of technology. This would have been a good experience for my proteges to learn that there are mentors out there in the real world who are also patient and willing to help.

*

Discussion Questions

1. What kind of outside activities or resources have you and your proteges used? How were these experiences beneficial to the group? What other activities would you like your mentor-protege group to take part in?

***

Chapter 11: Success Stories

Case: **The Ripple Effect**
Mentor: **Louise**

Yesterday afternoon, I happened to tell another teacher about my upcoming presentation to my protege Betsy's class. It always amazes me how divine providence works! This teacher had the only computer on a moveable cart. She suggested that I use it with our DATA VIEW or "wet screen" for the presentation. The "wet screen" is a computer projection panel which sends whatever is on the computer screen onto an overhead projecter. She gave me quick instructions on its set up and usage.

Today Janet, another of my proteges, came over to observe me setting up the wet screen, and then returned to see my presentation. She and Betsy were both fascinated! The wet screen will definitely be used again!

The lesson went well. All Betsy's students were interested and asked excellent questions at the end. One little girl even asked a question that amazed her teacher. Apparently, she has a very difficult time expressing herself and using phrases correctly. She actually asked a complete question with full understanding!

After school, I had my proteges and all other interested staff members come to the lab to learn how to set the wet screen up. I had six other teachers attend, not including my proteges!

The moveable computer/"wet screen" setup was being kept in a vault in the principal's office. I asked the principal if we could keep it in the lab with the other equipment, and she okayed it. Now we can all use it – and we all know how!

Challenge

The big payoff in mentoring is seeing the results of your hard work. These results can often be far–reaching indeed. The knowledge and support passed on from mentor to protege can potentially result in the confident and effective use of computer technology by each protege with his/her students. Thus, the development of the protege's skills has its ultimate impact on the children in his/her classroom.

Although not prompted to, every single mentor wrote about at least one success story. The mentors reported feelings of effectiveness and importance, conveying a general sense that it was all worthwhile. Some mentors expressed a desire to do it again. Many told of their proteges becoming mentors themselves.

Related Mentor Experiences: Great Moments in Mentoring

Rhoda:
Today I took the proteges to the lab to make their banners. Since we have one printer, only two of my four proteges were able to make their banners. The others watched in amazement. They will be making their banners next week and are looking forward to it.

Later in the day, I saw a frustrated Alice in the computer room. When I asked her why she was upset, she said, "I can't get this program to work, and I'm scared to death of this machine." I asked someone to take my class for me, and together Alice and I corrected the problem. She was so excited. She said, "I did it!"

*

Sharon:
Today was the day. I had to hook up the computer to the television and model a lesson on dividing decimals for Carla's class. I usually have small classes, so this would be a new experience for me in many ways. My greatest fear was of standing in front of this large class and having the equipment fail!

The lesson went very well. Carla remarked later that some of the students who were most involved in the lesson were not usually successful in math, but had really seemed to enjoy themselves.

For the lesson, I had used the *Microcomputer Workshop* program. At one point in the program, the answer to the multiplication part of the problem moved across the screen. The students thought it looked like the numbers were flying. To this day, you can hear students I pass in the hallway say, "Make it fly! Make it fly!"

*

Dorothy:
Carrie has been taking the individual computer into her room to use with her students. They are using both a writing program and *Easy Graph*. Carrie learned *Easy Graph* herself. We're getting there...

I hope I've convinced a kindergarten teacher and a first grade teacher to use the same writing program that they already use in their classrooms for the science fair. With parent supervision, kids could find and press keys, and become more familiar with the computer. I'm so excited that we now fight over who's going to get the computer lab!

*

Louise:
This is great! Janet (my computer–phobic) took her kindergarten class to the computer lab ALONE yesterday afternoon. She introduced them to the directions of FD, BK, LT, and RT for using *EZ Logo* in the classroom, then took them into the lab. She instructed them not to touch "a thing," and they didn't. She said she remembered someone telling her to always "ground out" by touching metal on a chair, so the class did this. Then they found the "F," "B," "L," and "R" keys and very gently touched them. Janet was *so* proud of herself and her kids. We're on a roll!!

*

Karen:
What a group! It will be interesting to see what they will do to pass their interest on. They are exactly what I wanted to get other teachers interested and involved.

I'm hoping that this group can stay in touch and maintain their interest and perseverance. Never in a million years would I have predicted the successes they have had (many of which they didn't think of when they planned their Individualized Mentoring Plan objectives)! I thought I would not have enough time to meet their needs, but I feel that they have grown and have a sincere interest in computers. Best of all, they have a good feeling about the whole experience.

*

Kelly:
This morning, we took Caroline's classes into the lab. It was great! The kids really responded to the programs! Caroline did a super job!

Caroline has really taken off! She's very motivated. My other protege, Sarah, is feeling more comfortable with the lab and has made a lot of progress in the last two weeks. Both Caroline and I have been trying to encourage her and give her ideas. It seems to be working!

*

Louise:
What a teacher Janet is!! I was so impressed with her math lesson today. Afterwards, I switched places with her. This lesson in the lab was fantastic. The kids really enjoyed themselves! They were rather talkative, but all of them understood and were able to do at least the first activity in *Clock Works*, including the little girl who speaks very little English. Janet is so enthusiastic about the possibilities of the lab!

*

Dorothy:
A protege of another mentor wants to use *Create with Garfield*. The protege and I were in the hall discussing when I could work with her. Helen overheard us, and told the other protege, "She's my mentor. Ask me, I'll help you with anything."

Helen was fooling around, but I'm sure there was some truth in the fooling. I was very proud of her. She showed so much confidence!

*

Sharon:
Carla now does the "TV hook-up routine" on her own!! She also made a new discovery. She has a visually impaired student who was reluctant to use the computer. Now she likes it because she can see the program on the larger television screen!

*

Sharon:
We're winding down...

Luke was so proud – he wanted to make a word-search puzzle, and was going to ask me to help. Instead, he decided to try it on his own, and was successful!

In the end, it does feel like we were able to accomplish some new things. I would like to do this again in the fall, but I'll let the teachers volunteer. (I've already had my guinea pigs!)

*

Rachel:
Cathy took her class up to the lab on her own today. The look of satisfaction on her face at lunch made this whole project worthwhile. She was so thrilled and pleased with herself that she could do it all successfully. I'm very proud of everything she has accomplished!

*

Dorothy:
Today was the last class of the program. What a class! Pat, Carrie and I planned our part of our school's presentation for the mentor class using *Create with Garfield*. We argued, suggested, inspired and printed. You should have heard Pat and Carrie – making suggestions, compromising and having fun!

Pat came in the lab today while I was teaching the sixth grade. She had many suggestions on how the program could have been networked more simply. How far she has come! She also took another teacher's class in this afternoon. She's teaching that person about the lab – becoming a mentor herself!

Great group! Great job! Kids benefit!

*

Eileen:
I know that my mentoring has had a positive influence on my protege. He is planning to take the course next year and become a mentor himself. Besides the opportunity to earn graduate credit, he is excited about helping his colleagues to realize that computers can make their jobs easier. He now feels that computers allow teachers to observe their students closely and help determine how they learn best.

*

Randy:
I am pleased with the progress of all three of my proteges. Jody has become very comfortable working with the mainframe. Last year she would call in several teachers to stand by for moral support while she used it, and now she doesn't even read the instructions! Laura has experienced all the wonderful things you can do with a database. This came in very handy when it was time to group kids for state testing. Barbara has started using computers for the first time, and brought in her own word processor to learn how to get set up on it. She is very excited about next year, when she will have one of the school's "roving computers" in her room to use.

I am proud of my proteges. Their IMP goals may not have been as intense or technical as some others, but both Laura and Barbara were using computers for the first time. Jody has become so proficient that I can now leave her in charge of the computers when I'm out of the building. There was another teacher in our pod who did not have time for the course, but did join our group on and off. She has expressed an interest in learning more about computers next year. Maybe I'll get a chance to help her, or better yet... Jody will!

*

Dixie:
When I pass my proteges' classrooms and see kids using the computers, I just about pop with pleasure. When I go into their classrooms and see computer work by both teachers and students, I can't help but smile. I love listening to my proteges talking about computers and their accomplishments, and I'm thrilled when I hear them making software suggestions to other teachers. The other day, one protege was brave enough to jokingly call herself a "computer expert" during lunch! Wow... what a high for me!

*

Marlene:
Tonight we finished up work on our slide show presentation for the final class meeting. We spent so much time "playing" with the different effects of the slides that we worked until 7:30 p.m.! We knew it would be a long session and had planned to send out for dinner, but by the time we looked at the clock it was too late to order.

When we got the project done, we looked for someone to be a critic — but it was so late that everyone else was gone. We went and got our custodian, Mr. Graham, and made him sit down and watch. I couldn't believe it when the poor man was subjected to an explanation of each step of the project. I'm not sure he understood!

To top it all off, my proteges must have watched the presentation four more times! When we were packing up to leave, Kathie said, "This was great! I've been feeling so down this week and this was just what I needed! I feel so good about this. I don't care what anyone else thinks, I think it's great!"

*

Discussion Questions

1. What type of mentor–protege results would make you feel that you had been a successful mentor?

2. What successes have you experienced as a mentor? How did these experiences make you feel?

***

Chapter 12: The Effectiveness of the Mentoring Program

Case: **Another Satisfied Customer**
Mentor: **Justine**

I believe the project had an enormous impact on my school. Between Bill and me, we mentored ten individuals, and I can tell by the amount of use the equipment is getting that it has had an effect. All ten of our proteges have spoken positively about their newly acquired skills. I feel that the exchange of knowledge and skills has been a real confidence booster for us all.

My proteges are changed by their new abilities. I see more use of technology, but even better, I see them thinking up new applications on their own. Their school wish lists are starting to include requests for technology. I've also heard them say that they enjoy working together, and their relationships with each other have been strengthened as a result of their participation in the project. They work together beautifully, sharing ideas on all topics and putting in long hours to improve their service to their students.

My school has definitely benefited from the success Bill and I had mentoring. Previously ignored equipment is now being used and shared, by our proteges as well as others who have seen the proteges' fruitful exploration into the world of technology. Now that more members of the staff are technology literate, they can focus on common goals to improve the entire school.

Has the mentoring project been effective in my school? You bet! I feel that computer mentoring has led to increased comfort levels with technology, greater creativity in the use of early childhood applications, and improved collaboration among my coworkers. Thanks for the memories!

Challenge

The world of education is a fast moving and increasingly demanding place. Computer technology has a great-deal to offer educators to make their jobs both easier and more effective. The purpose of the Computer Mentor Project is to explore mentoring as a way of improving teachers' technological abilities while capitalizing on their teaching and relationship–building skills.

So, does it work? After analyzing the experiences of five cohorts of mentors and proteges, the answer appears to be "yes." As expected, the use of a mentor model was successful in expanding the computer skills and usage of protege teachers. Many examples of these effects are presented in Chapter 11.

In addition, a number of unanticipated outcomes were identified. While proteges enjoyed impressive increases in their computer expertise, the mentors and schools associated with the project received some unexpected benefits. This chapter will discuss the effectiveness of the Computer Mentor Project and the main outcomes experienced by the mentors and schools who participated in the project.

Related Mentor Experiences: The Proof is in the Proteges

Teachers who participated in the Computer Mentor Project as mentors reported a variety of positive outcomes of their experiences. These results related to three basic types of outcomes: effects related to mentors' knowledge of technology, effects related to mentors' relationships with others, and effects related to mentors' desire to continue mentoring beyond the requirements of the project. In the following experiences, mentors discuss the ways in which they felt their own expertise was improved by their participation in the project.

Justine:
One of the many things I learned from mentoring was that there is value for the mentor as well as the protege. As a result of the project, I updated my knowledge of what technology is "out there." It was great to have a forum to investigate new applications, especially since technology changes so quickly. This kept the juices flowing, and helped me to fight the burn-out demon we all must deal with. I believe that technology has kept me on the positive side of teaching longer than if I had not found new techniques to support my trade.

*

Marlene:
I really enjoyed learning about how to write a fundable grant! I am hoping to do something with that knowledge in the future. A grant would be one way to make all of the exciting computer products I've seen a reality in my school!

*

Susan:
I thank you very much for the opportunity to use a modem. I enjoyed connecting to electronic bulletin boards and becoming proficient at something new. Best of all, I have been able to connect my computer at home to the file server at school. Now I have fun (if it is allowed!) doing my work in the comfort of my home instead of rushing to work early to get it done. I am anxious to introduce my new knowledge to others so they will enjoy the same benefits!

*

Randy:
My technology horizons were expanded as a result of the time we spent in class chatting about new products, how to solve problems we were encountering, and just "tech talk." Even though we sometimes got off the subject of what we were trying to accomplish, I felt that I learned a great deal in these sessions.

**

Project mentors also reported positive outcomes as a result of the relationships they built with their proteges. The next section of experiences reflect some of their feelings about the personal side of mentoring.

Marlene:
I feel very positive about my experiences with the Computer Mentor Project. I learned a lot about the role of being a mentor to someone, and the responsibilities that the relationship entails. There were times when I didn't feel that things were going as smoothly as I would have hoped, but I received many "warm fuzzies" while working with my proteges. I now feel, at the end of the course, that it was well worth it!

*

Eileen:
For me, working as a mentor was an opportunity to pay off an old debt. Over the last several years, I have had at least three mentors of my own. These people took an interest in me and my career goals, and were willing to spend hours of their time to guide and help me pursue those goals.

When I first heard about the Computer Mentor Project, I was excited at the prospect of being able to network with other computer enthusiasts and learn new things that could possibly help me do my job better. The mentoring aspect of the course was secondary to me, a requirement that I could live with.

As it has turned out, the mentoring part of the course was at least as beneficial to me as the networking opportunities. For one thing, it gave me the chance to give back some of what I had received in the past. Mentoring enabled me to use my own time to help someone professionally and personally.

*

Randy:
In the beginning, I felt that this course would be extremely easy for me since I would be doing what I already do as Computer Coordinator for my school. I was wrong. This course really helped me to reflect on the real responsibilities of my job. Now I feel that I am responsible for sharing my knowledge with others, and for helping them develop a positive attitude toward technology.

I have also had a chance to reflect on the people who acted as mentors for me. I always knew that I had "friends" who shared their knowledge and love of computers with me. I could never have had the many experiences I did without them and the hours they shared with me. I now feel that I, in turn, have to share what I know with others. It is a continuing cycle. I guess it's like those old "chain letters" that came in the mail; although I always felt momentarily guilty, I never continued the chain. Now I am involved in another "chain" which I have no desire to break.

*

Randy:

I felt more responsible as a mentor to my proteges than as a friend who helped people just because they walked into my room and asked. As a mentor, I actually had to guide my proteges along a planned course. Before, my "mentoring" was spontaneous, so I never looked at how I had helped someone from the start, watching their growth. As a formal mentor, I received comments each week from my proteges that made me feel that they were enjoying what they were doing and that I was making a difference.

*

Justine:
I feel glad that I took part in this project. I learned a lot, and I personally got the most out of the sense of regeneration I felt by helping others as I have been helped. I have been bitten by the technology bug, and now I hope I have infected a new generation.

I'm also glad that it's over. The mentoring experience was very intense. The roles that I fulfilled for my proteges included being a friend, teacher, and confidante. The relationships we developed together were complex. It's very rewarding to be a mentor, but it's also a lot of work!

*

Susan:
I formed strong relationships with my three proteges, but I also felt that I benefited from important relationships with the other mentors involved in the project. I learned a lot from them about technology and about how they handled different situations with their own proteges. It helped me to know that I could come to them for advice or support, just as my proteges came to me. I felt like I was being mentored on Wednesdays and then mentoring on Thursdays!

**

As the formal mentoring experience came to a close, many mentors found that they had not accomplished all they had set out to do, or that mentoring was too vital a process for them to simply stop doing it. As a result, a number of mentors reported their thoughts about continuing to mentor beyond the scope of the project. The following experiences reflect how different mentors came to feel about the continuation of their roles.

Marlene:
Throughout the time that I spent with my proteges, I actually felt intimidated when things didn't work out perfectly at some of our meetings. I felt like I should have everything under control because time was so precious, and we wanted to do so much. Now that I have them on a roll, I feel that it is my responsibility to keep them going.

I would like to continue the work that I started. I also hope that my proteges will help others with the knowledge and enthusiasm that they gained through this experience.

*

Randy:
Our last meeting was great! I was so excited, because my proteges said how proud they were of all they had learned and asked if we could still get together to do more! I had no idea that my proteges are as enthusiastic as I am.

As a continuing mentor, I will do some things differently. For example, I don't think I will write formal Individualized Mentoring Plans for my proteges in the future, but I will make sure I set up a plan and follow it. At the same time, I will continue to look for others to mentor me in areas where I need to grow.

*

Jean:
I will definitely continue the mentoring program at my school, both formally and informally. Just this week, another teacher was observing one of our sessions on using a database, and she immediately asked me if I would show her how to do it. This led to the solution of a problem that she had been having on her computer. Looks like I have another new customer!

*

Eileen:
When the program is over, I will continue to mentor in some capacity. My protege and I still have some goals that we want to accomplish, so we will continue to work together next school year. In fact, he is thinking of taking the course next year and becoming a mentor, so it will be interesting to see how the process continues. I'll be mentoring my protege, who will also be a mentor with a protege!

*

Justine:
Wow – there is so much being left undone! In retrospect, I might have encouraged my proteges to focus on fewer tasks. They were so enthusiastic up front to learn everything, we wound up taking on too much. In an informal evaluation, most of my proteges said they wished they had more time to go into detail on all of the topics we chose to cover.

Well, we will fix that! We've already discussed continuing our work with the same group, so that we can go into more depth on augmentative communication. My proteges are very motivated to learn more now that the door of technology has been opened to them. At the same time it is very exciting to watch them learn, and I feel responsible to guide them as long as possible.

**

Related School Experiences: A Building's Worth of Benefits

Chapter 11 mentions the "ripple effect," the magic way in which general interest in technology builds as people encounter its use or hear of its benefits from their peers. With this in mind, the mentors were asked at the end of the course if they had seen any changes in attitudes toward and use of technology among school personnel who had not formally participated in the project.

Mentors reported that the "technology bug" had a tendency to bite indiscriminately as others observed the activities of the mentor–protege groups within their schools. The following experiences reveal how some of these infections of interest took place, and how whole schools benefited as a result.

Rita:
I feel that my mentoring has led to a new group of young, enthusiastic teachers armed with knowledge of computers and the willingness to continue learning on their own.

From my observation of classrooms, I see increased quantity and quality of applications. I also see future plans in the making, such as cataloging and organizing software. And I see many teachers coming to me to discuss strategies for implementing technology.

At the beginning of the year, we practically had to pay a preschool teacher to join our computer committee at school. The other day, she came to me and said she wished that she had participated directly in our training sessions!

Our staff is thinking about what we need to round out our existing equipment. They are dreaming of what can be.

*

Jean:
The influence that the project has had on the school can be seen as you walk around the building. More classes are working on computers. The quality of students' work has improved, as they turn in neatly done assignments using computers. There are banners in the hallway from the newly mastered *Print Shop* program.

There has also been a big increase in the number of students utilizing the computer lab on their own. There is a sense of pride written on their faces as they see their work come from the printer. The teachers also remark on the way papers are being done by their students. I think the biggest bonus of this program has been the way the students have benefited from it.

*

Randy:
Our school secretaries recently returned from vacation to find a new computer in the office. They immediately had negative feelings about it, especially given the fact that they were not to receive formal training on it until four months later. I decided to expand my mentoring and help them out. I taught them *Microsoft Works*, concentrating on fancy tricks that would make their jobs easier. They eventually got caught up in what they were learning and became very excited about it. Now we are all so proud when they no longer need my help to complete something on the computer!

*

Susan:
My three proteges and I started to notice that we were attracting an audience for our Thursday afternoon meetings. Rick, our part-time Physical Education teacher, happened upon us once and then started coming in every Thursday, "just to see what we were up to." Kay, a teacher from my team area who had chosen not to participate in the project, became fascinated with the *Slide Shop* presentation we were creating. She stopped in for our meetings and became as excited as we were about the possibilities of this program. Other teachers frequently visited because we were carrying on so that they just had to see for themselves what was going on. These were great opportunities for my proteges to explain what they had just learned. Maybe I can get some of these folks interested in the project next year!

*

Discussion Questions

1. What outcomes do you anticipate for yourself as a result of your work as a mentor? Which outcomes are most important to you?

2. What outcomes for your school might accrue from your mentoring efforts? How can you facilitate these outcomes for the entire school as you work with your proteges?

***

Conclusion

Where Do We Go From Here?

What happens to your relationships with your proteges when the mentor class ends? Mentors have reported that a redefinition of the formal relationship often occurs. Many times mentors continue to provide information and support to their proteges on a less structured basis. As the protege's knowledge and confidence grow, the mentorship changes to a more collegial relationship. This is particularly true when proteges begin to mentor themselves, whether informally or through the Computer Mentor Project. And, as previously mentioned, strong friendships often develop. The direction and form of each new relationship will be as unique as the mentor–protege relationship that preceded it.

What happens to you as a mentor when the mentor class ends? Since mentoring is usually a continuous process rather than a finite experience, it is rare that mentors stop thinking of themselves as mentors once the formal class has ended. The training course may be over, but you are still embedded in the process of mentorship and are now entering a new phase in this process.

Literature on mentoring outcomes as well as the initial post–course experiences of the project's first three computer mentor groups indicate that the next phase of mentoring may take several forms. Many mentors actively continue to mentor. Some choose to do this informally, while others form a more structured mentoring environment. At the close of the course, mentors are still qualified to offer the school–based computer class to new proteges for state approved workshop credit, and may opt to do so.

The Computer Mentor Project was concerned with mentors' continuing development beyond the scope of the mentor class. The project encouraged mentors to maintain the supportive network which the class worked to construct. Meetings and workshops were arranged by the project to move each group from former mentor classmates to special interest group. Modems were provided to each participating school to stimulate mentor communication across schools. Finally, all mentors received membership in the Maryland Instructional Computer Coordinators' Association (MICCA), a supportive organization of instructional computer professionals. It was the hope of the project that these provisions would assist participants in their evolving roles as mentors.

Computer Mentoring Course Guide

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Computer Mentoring Course Guide

The Computer Mentor Project
University of Maryland at College Park
and
Prince George's County Public Schools

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Computer Mentoring Course Guide

The Computer Mentoring Course Guide is a product of the Computer Mentor Project, conducted jointly by the University of Maryland and Prince George's County Public Schools. The guide contains materials that may be helpful in establishing a teacher mentor program to expand computer knowledge and use in schools. The reader is encouraged to select and use those parts of the guide that are most useful in the development of each local program, adapting the materials as appropriate. The following materials are included in this guide:

- Sample course syllabus, including course information for the instructor and sample Individualized Mentoring Plan (IMP)

- Selected handouts, which correspond with the instructional videotape, Mentoring: Issues and Concerns, featuring mentoring expert Dr. Rochelle Clemson

- Examples of forms and letters used for project communication with mentors, proteges, and principals, including formal contract for participation

- Evaluation materials, including the Computer Use Questionnaire (for determining participants' current levels of functioning with technology and measuring change at the close of the course) and Mentor and Protege Course Evaluation forms (for obtaining participants' ratings of the course upon its completion).

Sample Course Syllabus
and
Individualized Mentoring Plan

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Sample Course Syllabus

Leadership in Computer Applications

Instructor
Date

Session 1	Registration	
	Course Introduction	
	Mentor Topic:	Clemson, R. What is a mentor? (1993). Mentoring: Issues and concerns. University of Maryland.
	Class Assign.:	Computer Questionnaire - Skills & Use
	Assignment For Session 2:	Huling-Austin, L. (1990). Squishy business. Mentoring: Developing successful new teachers. Association of Teacher Educators, 39-47. Q & A: Write a brief analysis of your mentoring style.
	Assignment For Session 3:	Sheingold, K., & Hadley, M. (1990). Accomplished teachers: Integrating computers into classroom practice. Bank Street College of Education: Center for Technology in Education. Q & A: List three key points in the study. What are the implications of the study for mentoring?
Session 2	Mentor Topic:	Styles and Phases of Mentor-Protege Relationship Needs Assessment and Individualized Planning (IMPs)
	Tech Topic:	Technology Resources for Mentors
	Assignment:	Pilato, V., Kercher, M., & Peterson, D. Getting started. Computer mentoring: A case book. Q & A: Answer questions in the case book.
Session 3	Mentor Topic:	Why be a mentor? Mentoring: Issues and concerns. Getting Started
	Tech Topic:	Implications of the Sheingold & Hadley report
	Assignment:	The mentor-protege relationship. Computer mentoring: A case book. Q & A: Answer questions in the case book.
	Notice:	Mentors will hold their first meeting with proteges between Session 3 and Session 4. The Needs Assessments (Computer Questionnaire: Skills & Use) will be completed, and mentor-protege teams should begin thinking about what the IMP will include.
	Free Response Assignment:	An ongoing assignment for the rest of the course will be a "Free Response" entry in the Response Log for each time mentors meet with their proteges. Entries should reflect their observation of what occurred during the weekly meeting and give insight into the mentoring process as mentors experience it.

Session 4	**All Participants**	(Proteges will attend with Mentors.) Develop Individualized Mentoring Plans. (Teams will plan, write at computers, present to class, and submit draft to instructor.)
	Assignment:	Protege attitudes toward being mentored & Protege attitudes toward technology. Computer mentoring: A case book. Q & A: Answer questions in the case book.
	Response Logs:	1-5
Session 5	Mentor Topic:	What do mentors do? Mentoring: Issues and concerns.
	Tech Topic:	*MicroGrade* and *MicroTest*
	Assignment:	Mentor's role. Computer mentoring: A case book. Q & A: Answer questions in the case book.
	Response Logs:	6-10
Session 6	Mentor Topic:	Tips for Training Teachers in Technology
	Tech Topic:	Simple Authoring Programs
	Assignment:	Protege concerns with behavior management. Computer mentoring: A case book. Q & A: Answer questions in the case book.
	Response Logs:	11-15
Session 7	Tech Topic:	Telecommunications
	Field Trip	**Thomas Pullen Creative Arts Magnet School** **Guest Speaker: John Jennings**
	Assignment:	Technology and troubleshooting. Computer mentoring: A case book. Q & A: Answer questions in the case book.
	Response Logs:	1-5
Session 8	Mentor Topic:	What does it take to be a mentor? Mentoring: Issues and concerns.
	Tech Topic:	Troubleshooting Hardware & Software Problems
	Assignment:	Logistics. Computer mentoring: A case book,. Q & A: Answer questions in the case book.
	Response Logs:	6-10
Session 9	**No Class:**	**Mentors will attend Maryland Instructional Computer. Coordinator's Conference (MICCA) at the Baltimore Convention Center.**
Session 10	Mentor Topic:	Mentor-Protege Problem Solving
	Tech Topic:	Share Information from MICCA
	Assignment:	Outside experiences for mentors and proteges. Computer mentoring: A case book. Q & A: Answer questions in the case book.
	Response Logs:	11-15
Session 11	Tech Topic:	Writing Fundable Proposals **Guest Speaker: Pat Jamison**
	Response Logs:	1-5

Session 12	Mentor Topic:	What works? Mentoring: Issues and concerns.
	Assignment:	Success stories. Computer mentoring: A case book. Q & A: Answer questions in the case book.
	Tech Topic:	Affective Software
	Response Logs:	6-10
Session 13	Tech Topic:	Multimedia Demonstration: Xapshot Camera & Videodiscs
	Assignment:	The effectiveness of the mentoring program & Conclusion. Computer mentoring: A case book. Q & A: Answer questions in the case book.
	Response Logs:	11-15
Session 14	Mentor Topic:	The three r's of mentoring? Mentoring: Issues and concerns. Course Evaluation
	Assignment:	Complete IMP with dates of accomplished objectives and all activities listed. **Final Report**: Write an essay (3 page minimum) that tells how computer mentoring has contributed to the advancement of instructional computing in your school. This essay should focus on your development, the progress of your proteges, and the overall progress of technology in your school.
Session 15	**All Participants**:	Reception for all Mentors, Proteges, Principals, and Guests Mentor-Protege Teams report what they have learned in their schools and on their field trips.
	Response Logs:	1-15 Protege Evaluations Due

Course Information for the Instructor

Class Sessions

The "Leadership in Computer Applications" course has two strands: mentoring and technology.

Mentoring Strand

Most teachers have not had formal training in mentoring although they may have numerous experiences they can relate to a mentor-protege relationship. Therefore, mentor topics for the course will remain somewhat the same. The mentor topics stem mainly from the accompanying videotape, Mentoring: Issues and Concerns and case book, Computer Mentoring: A Case Book. Exceptions are:

Session 2 *Styles and Phases of Mentor-Protege Relationships* is a discussion of the article "Squishy Business" and the assignment for mentors to write a brief analysis of what they think their mentoring style will be.

Session 3 *Mentor-Protege Problem Solving* is a small group activity for groups of 3-4 mentors to each share a particular problem they have had in mentoring. They are to look at all the issues which impact on the problem and then come up with creative solutions. The session ends with groups sharing their information.

Technology Strand

The technology topics, on the other hand, will vary from class to class depending on the expertise and experience of the mentors as well as their interests and classroom /school situations. However, a few standard topics should be considered:

Session 3 *Implications of the Sheingold & Hadley report--* Accomplished Teachers: Integrating Computers into Classroom Practice was chosen to give mentors a vision of the best uses of technology. Computer expertise does not insure effective educational use of technology. All teachers need to have a better understanding of where, when, and how the technology fits into their teaching. This report sets the tone for the class and is a basis for mentors to pass on to their proteges not just the nuts and bolts of how to use technology but also effective integration of educational technology. As technology grows and changes, this report should be replaced with something more current that will give mentors a vision of effective technology use.

Session 2 *Resources for Mentors* is one that is strongly recommended. Mentors should be aware of who and what is available to them in their school district and surrounding locations. Resources can include samples of computer software catalogs, educational computing magazines and journals, conferences, educational bulletin board systems, and educational computer organizations as well as names and phone numbers of district technology personnel. These resources can be pulled together in a resource packet which mentors may then wish to share with their proteges.

Session 6 *Tips for Training Teachers in Technology* makes teachers more aware of how they should work with their proteges, i.e., using a hands on approach with the protege while the mentor maintains a hands off policy, having an alternate plan in case of technology failure, creating "cheat sheets" for the protege so that he will experience success when the mentor is not present.

The remaining Tech Topics should reflect the interests and needs of the mentors. The Computer Questionnaire can be helpful in narrowing down deficits in the mentors' knowledge. A list of possible topics and guest speakers can be presented to the class for them to choose what they would like to explore. Guest speakers and field trips are stiumlating in that mentors see technology presented from another educational viewpoint. Attendance at a computer conference not only adds to the mentor's knowledge and gives him the opportunity to network, but also increases his self esteem as a professional educator. Mentors should also be aware of emerging technology even if they do not have it because as they become technology leaders in their own schools, they may be a part of future decision-making to purchase technology.

The Tech Topics could have a set agenda that deals with district goals and objectives, for example, if the district is implementing a new technology system such as an Integrated Learning System (ILS). The Tech Topics for the course could then focus on the instruction needed for the ILS, and mentors could pass on information they have learned to their proteges.

Session 15 Reception for Mentor-Protege Teams

This class is a culmination of the mentor-protege workshops. Mentor-protege teams are to come up with a creative way to share what they have learned throughout the course. No guidelines are given except a definition of creativity and a time limit of 5 minutes. Teams are, of course, encouraged to use technology as part of their presentations.

Questions in Computer Mentoring: A Case Book

The questions listed at the end of each chapter in the case book help mentors think more deeply about the mentoring process. The instructor may wish to choose specific questions for mentors to answer or have mentors choose one or two rather than answering them all.

Response Logs

The Response Log can be a computer disk or a notebook. There should be three sections on the disk or in the notebook: Q & A, Free Response, and IMP. The Q & A (Question & Answer) section contains all class assignments which include the analysis of your mentoring style (Session 2); key points in the Shiengold & Hadley report and implications for mentoring (Session 3); all questions answered as part of the case book assignments; and the final essay. The Free Response section contains the journal entries that mentors are to record weekly. Directions for this section are given in Session 3 on the Syllabus. The IMP section contains the plan that mentors and proteges come up with for the protege workshops. A sample IMP is included in this packet.

Response logs are collected on a rotating schedule throughout the course. Each mentor has a number from 1-15. The time for collection of the log is listed on the course syllabus with 5 logs being collected weekly beginning with the Session 5. The instructor reads and responds to the entries made since the last collection. This provides the instructor with a time to "mentor" each of the participants in a more individualized manner than is possible in a class with 15 students.

Computer Questionnaire

The questionnaire is filled out at the beginning of the course to give mentors an idea of the needs of their proteges and to help all participants see where they are in regards to what they know about technology. It may be helpful to give back the questionnaires at the end of the course and have participants mark with a colored pen where they are now in regards to their technology knowledge. They are often surprised to find how much they have improved.

Time

The "Leadership in Computer Applications" course is a two-hour class that meets weekly for 15 weeks. Since it is a three credit (45-hours) course, the other hour is the hour that each mentor spends with his protege(s). Protetges receive credit for 15 hours of work, with four of those hours being spent with the mentor at the two class sessions (Session 4 and Session 15) they attend together.

Materials Not Included in This Packet

Sheingold, K., & Hadley, M. (1990). Accomplished teachers: Integrating computers into classroom practice. Bank Street College of Education: Center for Technology in Education.

Huling-Austin, L. (1990). Squishy business. Mentoring: Developing successful new teachers. Association of Teacher Educators, 39-47.

Guiding Principles for Teaching the Course

1. **Model use of technology whenever possible.**

- For example, when the mentors and proteges attend the third session to create their IMPs, you might create a slide show that highlights the important aspects of the mentoring program. Use HyperCard, Linkway, or a simple program like Slide Shop and connect the computer to a VCR, television, or liquid crystal display projector. As part of the presentation, explain to the group what program it is and how you have connected it for group viewing.

- Create a database of mentors and proteges.

- Make handouts using word processing with graphics added for emphasis.

- Use Print Shop for banners and cards used as invitations to proteges and principals for the last session.

- Encourage mentors to keep the Response Log completely on a disk. Use a bold font to make comments to the mentor so that he can easily find them.

2. **Provide as many hands on activities as possible.**

- Create the IMPs in a computer lab with a template. Mentors can help eager proteges to begin to use a word processor and a template.

- Have small groups use word processing to keep notes for the group. These can easily be displayed as the small groups report back to the class.

- Include hands on activities as part of software demonstrations.

3. **Model mentoring.**

- Work on building relationships with and amongst class members. Establishing a warm, caring atmosphere will provide a base for mentors to extend that same caring to their proteges.

- Be positive. Write notes of encouragement and appreciation to mentors in their free response journals. If there is a particular problem with a mentor not carrying out his/her responsibilities for course credit, speak to him privately and offer options.

- Include snacks as part of the class. If mentors wish to continue, have them sign up to help out. In mentoring, basic needs should be addressed, and teachers are often hungry at the end of the day.

- Create certificates for both mentors and proteges for handing out at the last class to publicly recognize their hard work and effort.

- Continue to support mentors after the formal training is over.

    - A mentor newsletter keeps former mentors in contact with each other and notifies them of training opportunities, conferences, etc.

    - Informal sessions such as spending a summer morning learning a new software program and then going out to lunch together allows mentors to keep up the relationships established through the course and provides opportunities for them to update their knowledge and skills.

4. Educate yourself about mentoring and technology.

- Read articles about mentoring, coaching and peer collaboration to help you better understand the process.

- Keep abreast of the latest technology developments and share them with the class so that they are up-to-date on the latest developments in educational technology.

Individualized Mentoring Plan (IMP)

School: Samuel Chase Elementary
Mentor: Frances H. Moroz
Protege(s): Ute Hill

Meeting Time (Day and Time): Thursdays, 3:00-4:00 or 4:30
Meeting Place (Room #): Apple Computer Room, ESOL Classroom

Type(s) of Computers: Apple IIe, IIcPlus, IBM

Type an "x" next to what you have:
Computer Lab
Classroom Computers X
Computers on Carts X
Network System(s) (specify)X Jostens Integrated Learning System

I. Goal: Feel more comfortable using computers.

A. Objective: Learn to utilize appropriate drill & practice and tutorial software.
(Date accomplished: 2/6/92)

1. Activity: Discuss appropriate software for special needs students.

2. Activity: Learn to access teacher options.

3. Activity: Look at teacher options on two MECC programs and set them appropriately.

4. Activity: Practice setting different options for different students.

B. Objective: Be able to troubleshoot software problems.
(Date accomplished: 3/9/92)

1. Activity: Learn when to suspect that a disk has gone bad.

2. Activity: Use a utility program to ascertain the viability of a disk.

II. Goal: Learn to use applications software with students.

A. Objective: Use *Children's Writing and Publishing Center* with students.
(Date accomplished: 2/20/92-2/28-92)

1. Activity: Practice report format, learn to select fonts, place pictures, save work.

2. Activity: Set printer options.

3. Activity: Create student templates.

B. Objective: Use *Muppet Slate* with students.
(Date accomplished: 3/24/92)

1. Activity: Use the program manual to get started on a "fill-in" template.

2. Activity: Produce a template with "fill-in" options and graphics.

3. Activity: Use the *Big & Little* companion program to print a little book.

4. Activity: Integrate graphics from two different companion programs, *Seasons and Special Days* and *More Seasons and Special Days.*

C. Objective: Learn to use *AppleWorks.*
(Date accomplished: 4/2/92, 4/9/92, 4/30/92)

1. Activity: Demonstrate basic word processing skills. Learn most frequently used commands.

2. Activity: Demonstrate basic data basing skills. Learn most frequently used commands for inputting data.

3. Activity: Learn database manipulation, i.e., arranging, selecting records, freezing titles, setting up various reports for printing.

III. Goal: Feel comfortable with hardware.

A. Objective: Be able to troubleshoot setup problems.
(Date accomplished: 2/28/92, 3/24/92)

1. Activity: Use printer options on software to set up properly for printing.

2. Activity: Use diskette support correctly on MECC.

B. Objective: Be able to utilize hardware appropriately.
(Date accomplished: 2/20/92, 2/28/92, 3/5/92)

1. Activity: Place a color ribbon in ImageWriter II printer and print a *Children's Writing & Publishing Center* document in color.

2. Activity: Daisy chain disk drives when a program runs more efficiently on two.

3. Activity: Discuss ImageWriter functions such as loading paper to avoid jamming, setting paper thickness, etc.

Selected Handouts

*

Discuss *Accomplished Teachers: Integrating Computers into Classroom Practice* in your groups using the following questions/statements for discussion.

1. How do you feel about the change in roles for teachers to coach or facilitator? Are there teachers who don't want to be in this role?
2. What are the implications for our project in the fact that it took these teachers 5-6 years to master computer practices and approaches?
3. How do you feel about discovery learning? What about drill and practice?
4. What training have you taken advantage of on your own?
5. How do you keep current with the changing technology?
6. List all the different ways you use computers.
7. The report states that 15% of teachers are no longer using keyboarding. How do you feel about that?
8. What are your dreams for technology? (Think initiator!)
9. This point was made--Knowing that teachers use a type of software tells us little about how often they use it or how they use it! Comment from your own experience.
10. The number one use was in students creating their own products. Comment from the perspective of what you teach.
11. What unique uses of computers are you making?
    (ex. of word proc. & database for word problems)
12. Comment on the results shown on p. 14 in the chart "How Teaching Has Changed."
13. Comment on any of these statements from the report:

"The computer becomes an intellectual tool around which we operate to produce knowledge."

"We spend little time memorizing factual material that can be more easily accessed by a computer."--Inform. Age

"I see a future where students think and speculate while computers form rote arithmetic, algebraic, and statistical manipulation."

"I am more open-minded about problems having more than one answer and if a student can explain his/her solution, that is real learning."

14. Look at the statistics on p. 19 next to the bullets. Would they or should they be different if these were special education teachers?
15. Comment on the last paragraph on page 22.

Mentoring:

Issues and Concerns

Mentoring: Issues and Concerns

Session I: What is a mentor?

Session II: Why be a mentor?

Session III: What do mentors do?

Session IV: What does it take to be a mentor?

Session V: What works?

Session VI: The Three R's of Mentoring

Session I:

What is a mentor?

What is a mentor?

Each of us develops a definition of what mentoring means based on our experiences with mentoring. Think about your own experiences with mentoring. What do you think are the key characteristics that define the mentor relationship?

WHAT IS A MENTOR?

Bova, B.M., & Phillips, R.R. The mentoring relationship as an educational experience.

1. One of relatively high organizational status who by mutual consent takes an active interest in the career development of another person. *(Sheehy, 1976, p. 151)*

2. A guide who supports the person's dream and helps put it into effect in the world. *(Woodlands Group, 1980, p. 131)*

3. One defined not in terms of the formal role, but in terms of the character of the relationship and the function it serves. A mentor's primary function is to be a transitional figure, one who fosters the younger person's development, a mixture of parent and peer. *(Levinson, 1978, p. 98)*

4. A non-parental career role model who actively provides guidance, support and opportunities for the protege. The function of a mentor consists of role model, consultant/advisor and sponsor. *(Sheehy, p. 131)*

5. One who personalizes the modeling influences for the protege by a direct involvement not necessarily implied by a role model. Thus, in addition to being a role model, the mentor acts as a guide, a tutor, coach, and a confident. *(Botlon, p. 198)*

6. One who possesses sincere generosity, compassion and concern. They listen in the Rogerian sense, displaying feelings as well as ideas. *(Woodlands Group, p. 920)*

7. One who is receptive to looking objectively at accomplishments and giving encouragement, and also running interference for proteges being groomed for higher level jobs. *(Thompson, 1979, p. 30)*

8. A mentor may act as a host and guide welcoming the initiate into a new occupational and social world and acquainting the protege with its values, customs, resources and cast of characters. *(Levinson, p. 98)*

9. A mentor is a person who shares "the dream"--not necessarily a consciously formulated career goal but takes a cherished perception of self (ego ideal). *(Misserian, 1982, p. 87)*

10. Mentors are influential people who significantly help proteges reach major life goals, They have the power--through who or what they know--to promote welfare, training or career. *(Phillips-Jones, 1982, p. 21)*

(Bova & Phillips, 1984, p. 17)

Session II:

Why be a mentor?

Why be a mentor?

There are many different expectations and potential benefits in the mentoring relationship. Think about your own experiences as a mentor or protege. What expectations did you have when you entered the relationship? What benefits did you actually experience?

WHY BE A MENTOR?

I. Expectations: Mentor

- Professional Stimulation--Stretch myself
- Opportunity to help someone
- "Generative Impulse"
- Make contribution to profession
- Learn new techniques
- Form friendships
- Visibility -- Training for supervision / administration

II. Mentor-Protege Relationship

- Trust
- Reciprocity -- Both Benefit
- Status Differential

III. Advantages to Protege *(from L. Phillips-Jones, 1982)*

- Advice on career goals
- Encouragement
- New/improved skills and knowledge
- Models to follow
- Opportunities and resources
- Increased exposure/visibility
- A bridge to maturity

IV. Advantages to Mentor *(from L. Phillips-Jones, 1982)*

- Getting help at accomplishing their work
- Developing a dependable "Crucial Subordinate"
- Rewards for spotting and developing new talent
- Vicarious achievement
- Investment in the future
- Repaying past debts
- Remedying situation for underdogs
- Intimate relationship
- Resolution of adult ego state

V. What and How Proteges Learn From Their Mentors
(Survey from Bova and Phillips, 1982)

1. The development of risk taking skills
2. Communication skills
3. How to survive in the organization
4. Skills of their profession
5. Respect for people
6. Setting high standards for myself and not compromising them
7. How to be a good listener
8. How to get along with people--all kinds
9. Leadership qualities
10. What it means to be a professional. *(Bova & Phillips, 1982, p.8)* How to engage in active listening, how to create win-win situations, and understand what was expected to excel (e.g. get to work early, stay late, work weekends, and what to wear) were all factors in the protege's education. *(Bova & Phillips, 1982, p. 8-9)*.

Session III:

What do mentors do?

What do mentors do?

Mentors perform many duties and take on a number of roles for their proteges. Think about the things a mentor in your past may have done for you. What would you like to do for your proteges as you anticipate your role as a mentor?

A Place in the Sun

Mentor

Guardian
Cheerleader
Pioneer
Role Model
Inspiration
Confidant
Master
Teacher

Patron
Counselor
Opener of Doors
Developer of Talent
Successful Leader
Seminal Source
Griot
Coach

Davis and Garrison, 1979

WHAT DO MENTORS DO?

(Roger G. Lowney, PDK Fastback)

Staff development, consultation

Assistance in locating, organizing curriculum materials

Curriculum development

Classroom assistance to beginning teachers

Mentorship

- **Instruction**

- **Support**

- **Sponsorship**

Session IV:

What does it take to be a mentor?

What does it take to be a mentor?

The "personality fit" between the mentor and protege may be the most important aspect of the mentor-protege relationship. Think about a mentoring relationship that you have seen or experienced. How did the personality characteristics of the mentor and protege affect the success of the relationship?

WHAT DOES IT TAKE TO BE A MENTOR?

Mentor Characteristics

(Clawson, 1979)

- People oriented, tolerate ambiguity, conceptual thinkers, value their organization, like their work, respect their subordinates

(Gray & Gray, 1985)

- Secure, have power and expertise, trust their proteges
- Personal interest in careers of proteges, encourage proteges' ideas and help them gain confidence as professionals

Criteria for Selection of Mentors

(California Mentor Teacher Program -- Chula Vista School System)

- Exemplary teaching ability
- Effective communications skills
- Subject matter knowledge
- Mastery of range of teaching strategies
- Special skills and abilities
- Belief in value of teaching as a profession
- Committed to enhancing status of teachers

(Lowney, 1986 --- PDK)

- Have respect of their colleagues
- Hold high expectations for students
- Convey enthusiasm for learning to teachers and students
- Believe all children can learn and succeed
- Demonstrate initiative
- Have courage to share ideas and initiate change
- Demonstrate ability to plan and organize

Session V:

What works?

What works?

The mentor-protege relationship tends to be developmental. Think about your own mentoring relationships. How did these relationships unfold? What factors do you think contributed to the progression of the relationships?

There are many factors that affect the success of a mentoring relationship. Think about the elements that are integral to the success of mentoring. What four or five key elements are most important to successful mentoring?

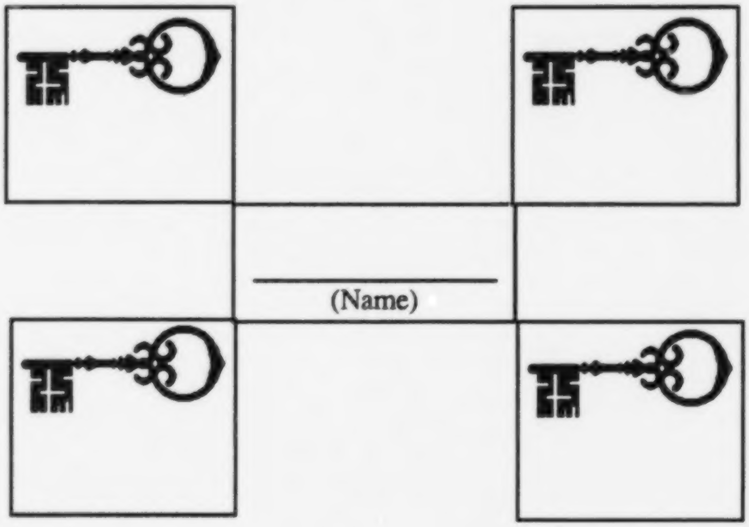
MENTORING: WHAT WORKS?

Mentors and the Act of Mentoring--A Composite
(Gerald Mager, 1989)

- Building on classroom success
- Having appropriate motives (Generative urge)
- Feeling responsible for beginner's success
- Dealing with ambiguity
- Having self confidence
- Starting positively
- Communicating openess to learning
- Recognizing importance of being effective
- Engaging in appropriate activities
  (Discussion, extended time together, involvement in classroom, etc.)
- Focusing on appropriate matters
  (Instructional, organizational)
- Displaying flexibility
- Sharing in decisions
- Being responsive, being available
- Trusting and being trustworthy
- Learning, renewing, and feeling rewarded
  (Benefits reported by mentors)

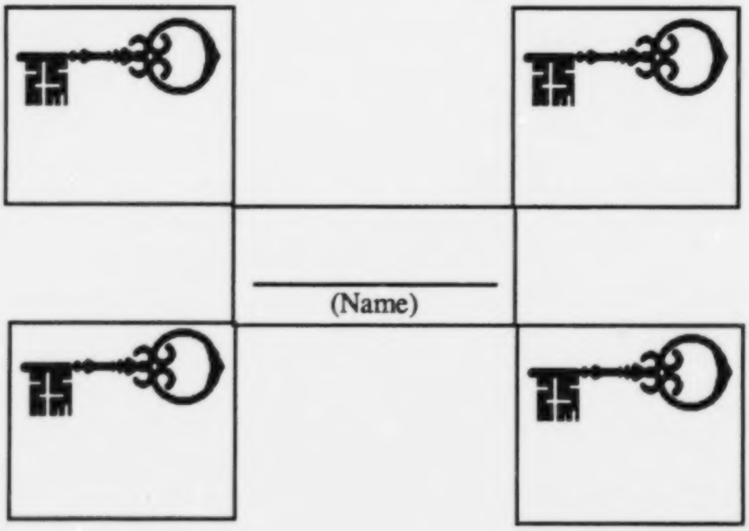
KEYS TO SUCCESSFUL MENTORING

Directions: Place your name in the center box. Think about the elements that are integral to the success of your mentoring program. Choose the four that you think are most important, and write one in each of the key boxes below.



KEYS TO SUCCESSFUL MENTORING

Directions: Place your name in the center box. Think about the elements that are integral to the success of your mentoring program. Choose the four that you think are most important, and write one in each of the key boxes below.



KEYS
TO
SUCCESSFUL MENTORING

Directions: In your group, discuss your individual choices. Then list the four or five most important elements in order of importance according to group consensus. If someone strongly disagrees, note it besides the choice.

1. ____

2.____

3.____

4.____

5.____

Additional Comments:

Session VI:

The Three R's of Mentoring

The Three R's of Mentoring

One model for mentoring involves "The Three R's": Repertoire, Reflection, and Relationships.

How could you incorporate "The Three R's" into your mentoring program?

THE THREE R'S OF MENTORING

Repertoire

Model variety of teaching strategies

Attend conferences, workshops with beginners

Sponsor presentations, workshops, seminars for beginners

Share instructional resources

- Contact people
- Books, workshops, media
- Journal articles

Create networks for observing, modeling, sharing

Relationships

Act as confidante

Provide moral support

Share successes and failures, joys and sorrows

Be a colleague, friend

Reflection

Coaching--provide feedback on instruction

Ask "hard questions" of herself and beginner

Keeping/sharing journals, logs

Paired problem solving

Mentorship -- Small Group List

Repertoire

1. ____________________
2. ____________________
3. ____________________
4. ____________________
5. ____________________
6. ____________________
7. ____________________
8. ____________________
9. ____________________
10. ____________________
11. ____________________
12. ____________________
13. ____________________
14. ____________________
15. ____________________
16. ____________________
17. ____________________
18. ____________________
19. ____________________
20. ____________________

Relationships

1. ____________________
2. ____________________
3. ____________________
4. ____________________
5. ____________________
6. ____________________
7. ____________________
8. ____________________
9. ____________________
10. ____________________

Reflection

1. ____________________
2. ____________________
3. ____________________
4. ____________________
5. ____________________
6. ____________________

Sample Forms and Letters

* * *

Prince George's County Public Schools
14201 SCHOOL LANE
UPPER MARLBORO, MARYLAND 20772

December 18, 1991

Special Education
952-6087

MEMORANDUM TO: [Name of Principal]
[Name of School]

FROM: Mary Kercher, Computer Mentoring Project Coordinator

RE: Spring 1992 Computer Mentoring Course

We are very pleased to have [Name of School] involved in the University of Maryland-PGCPS Computer Mentoring Project. We are looking forward to working with your school's mentor, [Name of Mentor].

Enclosed are samples of materials that have been sent to the mentors. There is an agreement form for the mentors to sign, information letters to the proteges, and an agreement form for proteges also to sign. You will need to sign all of the forms, but it will be the responsibility of the mentor to get them to you for your signature.

If you have any questions, please call me at 952-6087.

cc: [Name of Mentor]

Board of Education of Prince George's County

Prince George's County Public Schools
14201 SCHOOL LANE
UPPER MARLBORO, MARYLAND 20772

December 18, 1991

Special Education
952-6087

MEMORANDUM TO: [Name of Mentor], Computer Mentor at [Name of School]

FROM: Mary Kercher, Computer Mentoring Project Coordinator MK

RE: Spring Computer Mentoring Course

Welcome to our Mentoring project! I am looking forward to having you in our third Computer Mentoring Class.

Classes will be on Wednesday evenings from 4:30-6:30 P.M. in Room 222 at Thomas Johnson Middle School, starting January 29th. You will need to recruit your proteges prior to that first meeting. In recruiting your proteges, you may need to set up a time when they can meet with you since they will all have to meet at the same time (unless you want to mentor more than once a week!)

I have included:

For proteges:

- Letters explaining what is involved in the project and what the benefits are for them.
- Computer Mentor Project Descriptions for their information.
- Protege agreement forms that must be signed by each protege and your principal.
- Information sheets for each protege to be filled out and returned to you so that you can bring them to the first class.

For mentors:

- Information sheets for mentors to be filled out and returned at the first class.
- Mentor agreement forms that must be signed by you and your principal.

You will need to bring the following to the first class on January 29th:

1. **A check made out to the University of Maryland for $75. (The project will pay for part of your registration fee.)**
2. **Mentor Agreement Form signed by you and your principal.**
3. **Protege Agreement Forms signed by proteges and your principal.**
4. **Completed Mentor Information Sheet.**
5. **Completed Protege Information Sheets.**

If you have any questions, please call me at 952-6087.

cc: Pat Jamison, Project Director
Nancy Bishop, Director of Staff Development
Harry Gemberling, Director of Instructional Technology
Linda Lewis, Instructional Technology Specialist
[Name of Principal], Principal of [Name of School]

Enclosures: Protege Welcome Letters
Computer Mentor Project Descriptions
Protege Agreement Forms
Protege Information Sheets
Mentor Agreement Form
Mentor Information Sheet

University of Maryland--Prince George's County Public Schools
Computer Mentoring Project

Mentor Information Sheet

Name ____

School ____

Work Phone (______)____________ Home Phone (______)__________

Home Address ____

____

Protege(s): (1) ____

(2) ____

(3) ____

(4) ____

(5) ____

(One protege is enough and more than four or five proteges is probably too many.)

Bring this form to the first mentor class on January 29th.

University of Maryland--Prince George's County Public Schools

Computer Mentor Project

MENTOR AGREEMENT

I, ______________________________, understand my responsibilities as a Computer Mentor are to my proteges, my school, and to the UMCP-PGCPS project which sponsors this training. I will help my proteges develop and meet the objectives of their Individualized Mentoring Plans.

I am aware that I will be receiving a three-credit University of Maryland course at a reduced amount. I am responsible for attending all class meetings and completing class assignments.

____
Signature Date

____
Principal's Signature Date

Prince George's County Public Schools

14201 SCHOOL LANE
UPPER MARLBORO, MARYLAND 20772

January 6, 1992

Dear Computer Mentoring Project Protege:

Welcome to the University of Maryland--PGCPS Computer Mentoring Project!

The University of Maryland, in cooperation with Prince George's County Public Schools, has been awarded a grant from the U.S. Department of Education/Office of Special Education Programs to enhance teacher training in the effective use of computers. Our goal is to help teachers help each other with computer skills.

A teacher at your school has agreed to become a computer mentor. This teacher/ mentor will deliver computer training that is planned according to your needs and interests. Your inservice training, to be conducted primarily in your own school, will begin with needs assessment and planning, which we call "Individualized Mentoring Planning" (IMP). You and your mentor will work together weekly for a minimum of one hour before or after school.

You will receive one SAW-ME credit for the 15 hours of training you are given during this time. At the end of the semester, your mentor will be responsible for turning in a completed IMP which shows how objectives listed there have been met. Training through this project will be at no cost to you.

Your mentor will be trained to help you develop your computer skills by taking a course this semester called "Leadership in Computer Applications." You will also be asked to join two sessions of the mentors' course, which will meet at Thomas Johnson Middle School.

Board of Education of Prince George's County

Your schedule will be as follows:

Prior to 1/24: Your School	Complete the Protege Information Sheet Sign the Protege Agreement Form Get both forms to your mentor so that the Protege Agreement Form can be signed by your principal, also.
Week of 2/3: Your School	Your first Mentor-Protege school meeting for orientation and initial group planning.
Wednesday, 2/12 4:30-6:30 Thomas Johnson MS	You will be invited to attend the Mentor class with the other project participants from your school to meet other school Mentor-Protege teams and to develop your Individualized Mentoring Plan (IMP).
Weeks of 2/24-5/4 Your School	You will meet at least one hour weekly with your mentor to complete the objectives of your IMP.
Wednesday, 5/13: 4:30-6:30 Thomas Johnson MS	You will be invited to attend the Mentor class as a school team. Principals and other guests will be invited. This is the last mentor class and the end of the Spring 1992 mentor-protege training program.

Attached is the Protege Agreement form that you are asked to read and sign to express your commitment for the Spring Semester 1992. The Information Sheet is necessary so that you can receive SAW-ME credit and be informed of any changes made during the course. Please give your signed Protege Agreement form and Information Sheet to your mentor by January 24th.

I look forward to meeting you and wish you the very best in the Computer Mentoring Project!

Sincerely,

Mary Kercher

Mary Kercher

Computer Mentoring
Project Coordinator
PGCPS

cc: Pat Jamison
Project Director

Attachments: Protege Information Sheet
Protege Agreement Form

University of Maryland--Prince George's County Public Schools
Computer Mentoring Project

Protege Information Sheet

Name ______________________________

Mentor ______________________________

School ______________________________

Home Address ______________________________

____

Work Phone (______)____________ Home Phone (______)__________

Social Security Number ________________________

(Your social security number is needed so that you can receive SAW-ME credit.)

Subject & Grade Level ____________________________

Please return this form to your mentor by January 24th, 1992.

University of Maryland--Prince George's County Public Schools

Computer Mentor Project

PROTEGE AGREEMENT

I, ______________________________, understand my responsibilities as a Computer Protege are to my mentor, to the other proteges in my group, and to my school. I also realize a responsibility to the UMCP-PGCPS project which sponsors this training.

I am responsible for attending all training meetings and completing assignments. I will carry out the objectives of my Individualized Mentoring Plan.

Signature Date

Principal's Signature Date

UNIVERSITY OF MARYLAND AT COLLEGE PARK
INSTITUTE FOR THE STUDY OF EXCEPTIONAL CHILDREN AND YOUTH

Description of the Computer Mentor Project
Staff Development 1991-1993

The University of Maryland, in cooperation with the Prince George's County Public Schools, has been awarded a grant from the U.S. Department of Education/Office of Special Education Programs to enhance teacher training in the effective use of computers with special education students.

A teacher mentor model is being used. Over a three-year period, the Project is training cadres of experienced computer users to develop mentoring skills to help computer novices in their schools acquire expertise. Each participating school will benefit from the extension of teacher compentencies for integrating computers into instructional programs.

This training program is open both to Special Education and Regular Education teachers. Because Project funding focuses on services for students with disabilities, we request that at least one participant (mentors and proteges) from each school be a Special Education teacher.

Candidates for mentor training are selected who meet these criteria:

- Teach in a school that gives a high priority to the integration of instructional computing
- Recognized for computer expertise
- Committed to excellent teaching
- Reflective and self-aware
- Skilled at interpersonal relations
- Motivated to help others

In addition, mentor candidates will need to demonstrate that at least one less experienced computer-using teacher in their school would like to participate as a protege. Mentors will work with approximately 1-5 proteges.

Project Staff:

Charles MacArthur, UMD Project Director	Pat Jamison, PGCPS Project Director
Dana Peterson, UMD Project Assistant	Mary Kercher, PGCPS Project Coordinator

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DEPARTMENT OF SPECIAL EDUCATION • COLLEGE OF EDUCATION • 1220 BENJAMIN BUILDING • COLLEGE PARK, MARYLAND 20742-1161
(301) 405-6509 • FAX: (301) 314-9278

Computer Mentor Project Staff Development

WHAT?

- **Mentors:** The Project trains computer mentors through one computer mentoring course (15 weeks) each semester. The following course is delivered through the University of Maryland Office of Laboratory Experiences (OLE) for 3 graduate credits:

  EDSP 498p Special Problems in Special Education:
  Leadership in Computer Applications

  Instructor: Mary Kercher
  Assistant: Dana Peterson

  The course emphasizes both mentoring and technology so that mentors expand their own technology knowledge while they are mentoring technology novices.

- **Proteges:** Trained computer mentors provide school-based training and support for proteges.

WHO?

- **Mentors:** The Project identifies 6-12 Prince George's County teachers (K-12) for each mentoring course. Mentor Candidates must meet Project requirements focusing on instructional computing expertise, outstanding interpersonal skills, and effective teaching.

- **Proteges:** Mentor Candidates select approximately 1-5 teachers in their schools, who are instructional computing novices and have a desire to learn about computers through this innovative approach.

- **Each School:** Each participating school should be represented by at least one Special Education teacher.

WHEN?

- The first mentoring course was offered in the Spring semester of 1991. In the 1991-92 and 1992-93 school years the course will be offered in both the Fall and the Spring semesters. Mentor candidates will be notified of actual dates and times.

WHERE?

- **Mentor Course Site:** William Paca Staff Development Center or another site convenient to participating teachers

- **Protege Training:** In the proteges' schools

Evaluation Materials

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Computer Use Questionnaire

Computer Mentor Project
University of Maryland and Prince George's County Public Schools

This questionnaire is designed to obtain information on mentor and protege computer use. The results of this questionnaire will be used to evaluate the Computer Mentor Project. This questionnaire will not be used to evaluate the mentors or proteges in any way.

Please complete the following:

Today's Date: ____________________

Your Name: ____________________

Your School: ____________________

Your Teaching Assignment (regular or special education, grade level, subjects taught):

____

How many years (not counting this year) have you been using computers with students? _____

I. OPERATIONAL SKILLS

In this section, please use the following scale to rate your skill at operating various types of computer hardware and software. Please base your ratings on your own ability to operate the hardware and software, not your experience using them with students. Circle the appropriate number for each item.

0	I have **no knowledge** or skill in this application.
1	I have some knowledge but have **never actually used** this application.
2	I have used this application, but have **limited skill**.
3	I have **moderate skill** in this application.
4	I am **highly skilled** in this application.

IA. HARDWARE

How skilled do you feel you are at:

	No Knowledge	Never Used	Limited Skill	Moderate Skill	High Skill
1. Operating IBM computers?	0	1	2	3	4
2. Operating Apple computers?	0	1	2	3	4
3. Operating MacIntosh computers?	0	1	2	3	4
4. Operating other computers?	0	1	2	3	4
5. Typing on the computer?	0	1	2	3	4
6. Using a modem?	0	1	2	3	4
7. Using a projection screen with an overhead projector?	0	1	2	3	4
8. Troubleshooting basic hardware problems?	0	1	2	3	4
9. Using powerpads and touchscreens?	0	1	2	3	4
10. Using speech synthesizers?	0	1	2	3	4
11. Using assistive devices to compensate for handicaps (e.g., magnified text or alternate keyboards)?	0	1	2	3	4

IB. COMPUTER ASSISTED INSTRUCTION

How skilled do you feel you are at:

1. Running drill and practice software?	0	1	2	3	4
2. Running problem solving and simulation software?	0	1	2	3	4
3. Using the networked software in your school?	0	1	2	3	4
4. Using software that is designed to let you put in different content for individual students (e.g., adding particular words to a spelling drill)?	0	1	2	3	4

In this section, please circle the appropriate number for each item. If you have indicated that you use the application listed, please specify the name(s) of the software you have used on the line provided.

IC. SOFTWARE TOOLS

How skilled do you feel you are at using:	No Knowledge	Never Used	Limited Skill	Moderate Skill	High Skill
1. Word processing and related software?	0	1	2	3	4
(please specify): ______					
2. Utilities for creating worksheets, puzzles, signs, etc.?	0	1	2	3	4
(please specify): ______					
3. Utilities for statistics or graphing?	0	1	2	3	4
(please specify): ______					
4. Graphics software (drawing, desktop publishing)?	0	1	2	3	4
(please specify): ______					
5. Software for testing and instructional management (creating tests and IEPs, maintaining gradebook)?	0	1	2	3	4
(please specify): ______					
6. Spreadsheet and database software?	0	1	2	3	4
(please specify): ______					
7. Authoring programs to develop instructional software which lets you present information and ask students questions?	0	1	2	3	4
(please specify): ______					
8. Multimedia software (software that combines text, video, and/or sound)?	0	1	2	3	4
(please specify): ______					
9. Programming languages (e.g., *Logo* or *BASIC*)?	0	1	2	3	4
(please specify): ______					
10. Other software tools?	0	1	2	3	4
(please specify): ______					

IIA. ACTUAL USE OF COMPUTERS

This section asks you how often you use various types of computer applications. Consider your use during a **typical week within the past month**. If your use varies from week to week, average the high and low weeks. Check the appropriate box for each item.

1. Overall, how often have you used computers with students in the past month?

☐ not at all
☐ less than one hour a week
☐ one hour a week
☐ two to four hours a week
☐ five to ten hours a week
☐ 10 to 15 hours a week
☐ more than 15 hours a week

2. Overall, how often have you used computers yourself (without students) for personal or professional reasons in the **past month**?

☐ not at all
☐ less than one hour a week
☐ one hour a week
☐ two to four hours a week
☐ five to ten hours a week
☐ 10 to 15 hours a week
☐ more than 15 hours a week

IIB. ACTUAL COMPUTER USE

Please indicate the amount of time you use computers both for personal/professional use and with students. Place a check in the appropriate box for each item under "Personal/Professional Use" and "Use with Students."

During a typical week within the past month, how many hours did you use the computer with:	**Personal/Professional Computer Use Hours per week**							**Computer Use with Students Hours per week**						
	none	less than 1 hour	1 hour	2-4 hours	5-10 hours	10-15 hours	15+ hours	none	less than 1 hour	1 hour	2-4 hours	5-10 hours	10-15 hours	15+ hours
1. A modem?	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
2. A projection screen and overhead projector?	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
3. Powerpads and/or touchscreens?	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
4. A speech synthesizer?	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
5. Drill and practice software?	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
6. Problem solving and simulation software?	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
7. Networked software in your school? (Your response may overlap with other categories.)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
8. Software that is designed to let you put in different content for individual students?	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
9. Word processing and related software?	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

ACTUAL COMPUTER USE, continued

During a typical week within the past month, how many hours did you use the computer with:	**Personal/Professional Computer Use Hours per week**							**Computer Use with Students Hours per week**						
	none	*less than 1 hour*	*1 hour*	*2-4 hours*	*5-10 hours*	*10-15 hours*	*15+ hours*	*none*	*less than 1 hour*	*1 hour*	*2-4 hours*	*5-10 hours*	*10-15 hours*	*15+ hours*
10. Utilities for creating worksheets, puzzles, signs, etc.?	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
11. Utilities for statistics or graphing?	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
12. Graphics software (e.g., drawing, desktop publishing)?	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
13. Software for testing and instructional management (e.g., creating tests and IEPs, maintaining gradebook)?	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
14. Spreadsheet and database software?	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
15. Instructional software you developed using authoring programs?	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
16. Multimedia software (software that combines text, video, and/or sound)?	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
17. Programming languages (e.g., *Logo* or *BASIC*) ?	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
18. Other applications? (please specify): ____________________	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

____

III. MANAGEMENT SKILLS

In this section, you will rate your skill in managing the use of computers for various purposes in your classroom and in the computer lab. "Management" refers to issues related to classroom organization, scheduling activities, grouping students, maintaining on-task behavior, and monitoring student work.

IIIA. MANAGEMENT OF COMPUTERS IN THE CLASSROOM

Do you use computers with students in your own classroom?

☐ Yes ☐ No (If "No," please skip to Section IIIB).

In this section, please use the following scale to rate your skill at each of the following classroom computer management tasks. Circle the appropriate number for each item.

1	My skills in this area are **limited**.
2	My skills in this area are **average**.
3	My skills in this area are **above average**.
4	My skills in this area are **excellent**.

How skilled do you feel you are at:	limited	average	above average	excellent
1. Managing independent use of computers by individual students while you are working with other students?	1	2	3	4
2. Establishing and enforcing rules for computer use?	1	2	3	4
3. Training students to use hardware and software independently?	1	2	3	4
4. Monitoring student performance on computer tasks?	1	2	3	4
5. Managing cooperative learning activities using the computer?	1	2	3	4
6. Managing computer demonstrations/presentations to the whole class?	1	2	3	4

IIIB. MANAGEMENT OF COMPUTERS IN THE COMPUTER LAB

Do you use computers with students in the computer lab?

☐ Yes ☐ No (If "No," please skip to Section IV).

In this section, please use the following scale to rate your skill at each of the following computer lab management tasks. Circle the appropriate number for each item.

1 My skills in this area are **limited**.
2 My skills in this area are **average**.
3 My skills in this area are **above average**.
4 My skills in this area are **excellent**.

How skilled do you feel you are at:	limited	average	above average	excellent
1. Scheduling lab sessions?	1	2	3	4
2. Moving your class to the computer lab and getting started?	1	2	3	4
3. Establishing and enforcing rules for the computer lab?	1	2	3	4
4. Training students to use hardware and software in the lab?	1	2	3	4
5. Monitoring student performance on computer tasks?	1	2	3	4
6. Managing independent computer use in the lab?	1	2	3	4
7. Managing cooperative learning activities in the lab?	1	2	3	4
8. Managing whole class instruction in the lab?	1	2	3	4

IV. INTEGRATION WITH CURRICULUM

In this section, please use the following scale to rate your skill at integrating computer use with the curriculum. Circle the appropriate number for each item.

1 My skills in this area are **limited**.
2 My skills in this area are **average**.
3 My skills in this area are **above average**.
4 My skills in this area are **excellent**.
NA This item is **not applicable** to me.

Overall, how skilled do you feel you are at:	limited	average	above average	excellent	not applicable
1. Designing lesson plans that integrate computer activities?	1	2	3	4	NA
2. Selecting software that fits your students' needs?	1	2	3	4	NA
3. Evaluating student progress on computer activities?	1	2	3	4	NA

INTEGRATION WITH CURRICULUM, continued

Overall, how skilled do you feel you are at integrating computer use with:	limited	average	above average	excellent	not applicable
4. The math curriculum?	1	2	3	4	NA
5. The reading/language arts curriculum?	1	2	3	4	NA
6. The social studies curriculum?	1	2	3	4	NA
7. The science curriculum?	1	2	3	4	NA
8. The arts curriculum?	1	2	3	4	NA
9. Other areas of the curriculum?	1	2	3	4	NA

(please specify): ______________________________

V. COLLABORATION AND PROFESSIONAL GROWTH

In this section, please use the following scale to rate your skill in each of the areas of growth listed. Circle the appropriate number for each item.

1	My skills in this area are **limited**.
2	My skills in this area are **average**.
3	My skills in this area are **above average**.
4	My skills in this area are **excellent**.
NA	This item is **not applicable** to me.

How skilled do you feel you are at:	limited	average	above average	excellent	not applicable
1. Providing consultation and technical assistance to others?	1	2	3	4	NA
2. Developing plans for school computer use with other staff members (including such activities as setting goals, gaining administrative and financial support, and recruiting other staff members?	1	2	3	4	NA
3. Establishing contacts with teachers and other professionals outside your school?	1	2	3	4	NA
4. Identifying and using resources for continued growth, such as books, journals, and professional organizations?	1	2	3	4	NA

**THANK YOU FOR COMPLETING THE MENTOR/PROTEGE
COMPUTER USE QUESTIONNAIRE.**

MENTOR COURSE EVALUATION

Tech Topics

Circle the appropriate letters for each statement.	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
The course increased my technical skills with computer hardware and software.	SA	A	N	D	SD
The demonstrations and opportunities to try out software were helpful.	SA	A	N	D	SD
The course increased my knowledge of technology resources.	SA	A	N	D	SD
The course increased my skill at integrating computers with instruction.	SA	A	N	D	SD

Which tech topics were most interesting and helpful?

Did you use any of the technical information presented in the course? How?

What additional tech topics would you like to see covered in the course?

Besides additional topics, what other suggestions do you have for improving the tech topic portion of the course?

Mentor Topics

Circle the appropriate letters for each statement.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
The course helped me work with my proteges successfully.	SA	A	N	D	SD
The case book on computer mentoring was helpful.	SA	A	N	D	SD
The IMP was useful in structuring the mentoring process.	SA	A	N	D	SD
Writing in the response logs helped me understand the mentoring process.	SA	A	N	D	SD
The guest presentation by Dr. Shelley Clemson helped me understand the mentoring process.	SA	A	N	D	SD
I learned a lot from being a mentor.	SA	A	N	D	SD

What do you see as the strengths of the mentoring portion of the course?

What suggestions do you have for improving the mentoring portion of the course?

Do you feel you have benefited from being a mentor? How?

Thank you for completing the mentor course evaluation.

Protege Course Evaluation

Circle the appropriate letters for each statement.	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
The course increased my technical skills with computer hardware and software.	SA	A	N	D	SD
The course increased my skill at integrating computers with instruction.	SA	A	N	D	SD
I learned more from a mentor in my own school than I would have from a traditional inservice course.	SA	A	N	D	SD
The IMP was useful in structuring the learning process.	SA	A	N	D	SD

What were the advantages of working with a mentor in your own school?

What were the disadvantages, if any?

What do you see as the strengths of the course?

What suggestions do you have for improving the course?

Thank you for completing the protege course evaluation.